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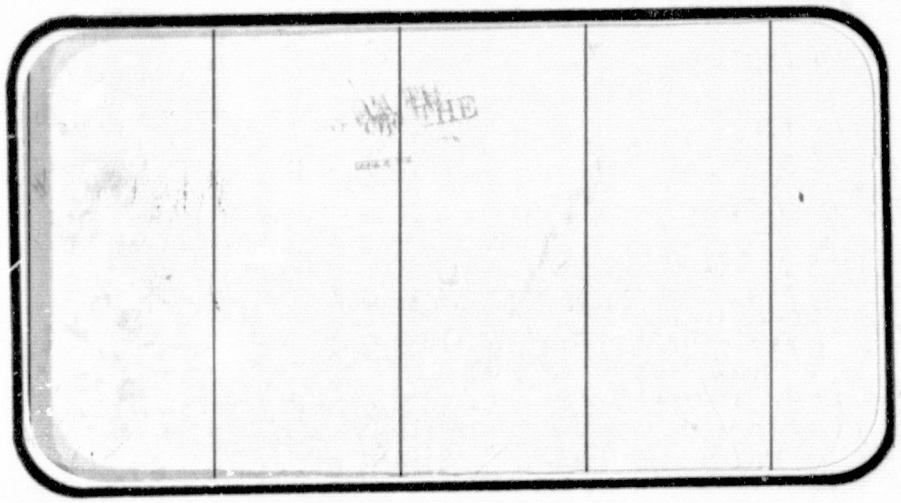
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(NASA-CR-144595) RESULTS OF TESTS IN THE AEDC VKF TUNNEL B USING THE PHASE CHANGE PAINT TECHNIQUE ON 0.04 SCALE 50 PERCENT FOREBODY MODELS (82-0) OF THE ROCKWELL SPACE SHUTTLE ORBITER (OH50A) (Chrysler Corp.) G3/18

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

February, 1976

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NASA CR-144,595

RESULTS OF TESTS IN THE AEDC VKF TUNNEL B USING THE PHASE CHANGE PAINT TECHNIQUE ON 0.04 SCALE 50 PERCENT FOREBODY MODELS (82-0) OF THE ROCKWELL SPACE SHUTTLE ORBITER (OH50A)

by

M. Quan
Shuttle Aerosciences
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Prepared under NASA Contract Number NAS9-13247

by

Data Management Services
Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	AEDC VKF-B VA526-21BA
NASA Series Number:	OH50A
Modle Number:	82-0
Test Dates:	March 29 and April 10, 1974
Occupancy Hours:	16

FACILITY COORDINATOR:

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RESULTS OF TESTS IN THE AEDC VKF TUNNEL B USING THE PHASE CHANGE PAINT TECHNIQUE ON 0.04 SCALE 50 PERCENT FOREBODY MODELS (82-0) OF THE ROCKWELL SPACE SHUTTLE ORBITER (OH50A)

by

M. Quan
Rockwell International Space Division

ABSTRACT

This report presents model information and data from wind tunnel tests conducted on 0.04 scale 50 percent forebody models of the Rockwell Space Shuttle Orbiter. These tests were conducted in the AEDC Tunnel B using the phase change paint technique to determine aerodynamic heating rates due to various protuberances and recessions. Angles of attack from 20° through 45° were investigated at Mach 8.

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NOMENCLATURE

Symbol	Tab Data Symbol	Definition
c		local chord, in.
C_p	C	specific heat of model material, BTU/lb-°F
g		acceleration due to gravity, ft/sec^2
$h(R_T)$	$H(R_T T_O)$	thin film heat transfer coefficient based on R_T, BTU/ft^2-sec-°F
h		thin film heat transfer coefficient, BTU/ft^2-sec-°F
h_s	HREF	theoretical stagnation point thin film heat transfer coefficient, BTU/ft^2-sec-°F
k	K	thermal conductivity of model material, BTU/ft-sec-°F
LH		left hand side
M_∞	MACH NO	freestream Mach number
N_R		nose radius, ft
P_∞	P-INF	freestream static pressure, psia
P_O	PO(PSIA)	stagnation pressure, psia
P_1, P_2		Mach parameters, defined in context
P_r		Prandtl number
$\dot{q}$		heat transfer rate, BTU/ft^2-sec
$\dot{q}_s$		theoretical stagnation point heat transfer rate, BTU/ft^2-sec
q_∞	Q-INF	freestream dynamic pressure, psia
R		gas constant, ft-lb$_f$/lb$_f$/lb$_m$-°R
R_N		Reynolds number

NOMENCLATURE (Continued)

Symbol	Tab Data Symbol	Definition
R_N/ft	RE/FT	unit Reynolds number, per foot
R_T		recovery factor
RH		right hand side
ST	STREF	Stanton number
t		time, sec
T		temperature
$\bar{T}$	TBAR	normalized temperature parameter
T_∞	T-INF	freestream temperature
T_o	TO	stagnation temperature
T_{AW}		adiabatic wall temperature
T_{IN}		initial temperature
T_{PC}		paint phase change temperature
TPS		thermal protection system
V_∞	V-INF	freestream velocity, ft/sec
V_e		local velocity, ft/sec
X		distance coordinate along model wall, ft
Z_o		Orbiter water line, in
α	ALPHA-MODEL	model angle of attack, deg.
β		defined in context
γ		ratio of specific heat of air
δ		local surface angle relative to freestream flow, deg.

NOMENCLATURE (Concluded)

Symbol	Tab Data Symbol	Definition
θ		local surface angle relative to model centerline, deg.
ψ	YAW	yaw angle, degrees
ρ	RHO	model material density, lbm/ft^3
ρ_S		freestream air stagnation density, lbm/ft^3
ρ_W		air density along model wall, lbm/ft^3
ρ_∞	RHO-INF	freestream air density, lbm/ft-sec
μ		viscosity, lbm/ft-sec
μ_∞	MU-INF	freestream viscosity, lbm/ft-sec
μ_W		air viscosity along model wall, lbm/ft-sec
μ_S		stagnation air viscosity, lbm/ft-sec

INTRODUCTION

Tests were conducted on 0.04 scale models of the Shuttle Orbiter at the Arnold Engineering Development Center, von Karman Facility, Tunnel B. These tests, designated OH50A, were conducted during two 8 hour shifts on March 29 and April 10, 1974.

The models used were 0.04 scale representations of only the forward 50 percent of the Orbiter based on Rockwell lines VL70-000140C. Their model identity number is 82-0. Two of the models built had a smooth external surface and two had various protuberances and recessions built in.

The purpose of these wind tunnel tests was to determine the effects of the protuberances and recessions at various Reynolds numbers and model angles of attack and yaw. Reynolds number was varied from 0.5 to 2.0 X 10^6/ft. Angle of attack was varied from 20° to 45° and yaw angle was set at 0°, ±1° and ±2°. Nominal Mach number was 8.0.

The phase change paint technique was used to determine heating rates. Six runs were also made with oil flows. The results are presented in figures 8c through 8y.

CONFIGURATIONS INVESTIGATED

The models used, number 82-0, were 0.04 scale representations of the forward 50 percent of the Orbiter. The configuration was defined by Rockwell lines control drawing VL70-000140C. Model design and fabrication work was subcontracted to Lockheed - Huntsville, Alabama.

The models were cast in one piece using a Lockheed epoxy compound called material LH. The specific material composition was considered proprietary to Lockheed, but material properties needed for the data reduction were provided from material samples by a calibration laboratory, Dynatech, Inc., in Cambridge, Massachusetts. The models were cast about a hollow metal model sleeve with stiff foam used as a filler. Foam was used both to reduce the weight of the orbiter and to alleviate the fear that a solid material LH model would be prone to crack during manufacture. Figure 2 shows a model cross-section.

Five models were used in this test. One was painted with a stripe reference system (see figure 3) to facilitate data reduction and analysis by accounting for camera distortion and perspective. It was not used as a test article. Two others had a smooth exterior surface while the remaining two had protuberances and recessions added or machined onto them. Figures 4, 5, and 6 show the locations of these surface irregularities. Figure 7, sheets 1-5, provides dimensional details of the protuberances and recessions.

Following is a list of the protuberances and recessions duplicated on the two applicable models:

CONFIGURATIONS INVESTIGATED (Continued)

Item	Shown in Figure
Windshield	5,7 (sheet 1)
Hatch Window	6,7 (sheet 3)
RCS Thruster Vent	6,7 (sheet 3)
RCS Tank Compartment Vent	6,7 (sheet 3)
Fuselage Cavity Vent (RH)	4,7 (sheet 1)
Fuselage Cavity Vent (LH)	6,7 (sheet 4)
Forward RCS Thruster Parts (10)	4,5,6
Escape Hatch	5,7 (sheet 2)
Upper Observation Window	5,7 (sheet 2)
Vents	6,7 (sheet 4)
Sublimator Vent (RH)	4,7 (sheet 1)
Sublimator Vent (LH)	6,7 (sheet 4)
Mid Fuselage Vent	6,7 (sheet 5)
Cargo Bay Vent	6,7 (sheet 5)
Cargo Bay Door Gap	5
Nose Landing Gear Door Gap	5
Preflight Access and Star Tracker Door Hinges	6,7 (sheet 3)
Cargo Bay Door Hinges	6,7 (sheet 5)

There were no configuration variations on these models other than with or without protuberances, so the only nomenclature used in the run

schedule was an "S" denoting a smooth model and a "P" for one with protuberances. However, for information, the following nomenclature symbols had been assigned to the components of the configuration tested:

B_{60} - 50% Body

C_{10} - Canopy

Dimensional data for these components are given in Table II.

INSTRUMENTATION

The following instrumentation was required for the test:

1) One 70mm camera for each of the top, bottom, left, and right views.

2) A digital contact thermometer for recording model initial temperature.

3) A video tape television set-up with capability for on-line monitoring and replay.

TEST FACILITY DESCRIPTION

Arnold Engineering Development Center (AEDC) is an Air Force facility in Tullahoma, Tenn. Tunnel B, used for this test, is in the von Karman Facility. Engineering and other technical operations in this tunnel are conducted by contractor personnel of ARO, Inc.

Tunnel B is a continuous, closed circuit, variable density wind tunnel with an axisymmetric contoured nozzle and a 50-inch diameter test section. The tunnel can be operated at a nominal Mach number of 6 or 8 at stagnation pressures from 20 to 300 and 50 to 900 psia, respectively, and at a stagnation temperature of up to 1350°R. The model may be injected into the tunnel for a test run and then retracted for model cooling or model changes without interrupting the tunnel flow.

TEST PROCEDURE

The model was installed inverted in the tunnel. Just prior to each run, the initial temperature of the model was measured using a contact thermometer. This thermometer consisted of a thermocouple mounted at the end of a probe which was placed against the model surface.

Four cameras were set up to take continuous sequence pictures of the model top, bottom, left and right sides. However, it should be noted that not every view was significant on all runs. Therefore, for each run, isotherms were drawn only for those views where useful data were obtained.

After initial start-up, the tunnel was running continuously and flow was always established in the test section. A freshly painted model, orginally in an injection chamber outside the tunnel, was injected to the chamber. This injection chamber was sealed against air leakage to the tunnel and to the atmosphere.

Continuous sequence pictures were taken throughout the test period. The duration of the test period varied with the paint melt temperature selected and estimated heating rates. After injection and retraction, the model was removed from the sting and a freshly painted model installed in its place.

DATA REDUCTION

The phase change paint technique is an approximate method of determining aerodynamic heating rates from hypersonic wind tunnel tests. Briefly, it involves the spray application of a temperature-sensitive paint to a model prior to installation in a wind tunnel. The paint dries in a thin coat of opaque solid which, when heated to a given temperature, will turn into a colorless liquid. Sudden exposure (by injection into the air flow) to a hypersonic airstream will initiate aerodynamic heating of the model surface. The paint will melt (change phase) when the local surface temperature reaches its calibrated melt temperature. The propagation of this melt line is recorded by a camera which takes pictures at a preset rate. Later, each frame is correlated with the amount of time the model had been in the flow to obtain aerodynamic heating rates.

A paint stripe reference system was on one model. Pictures were taken of this model at the six angles of attack. These pictures are presented in this report so the actual position of various melt lines can be determined from the paint stripe model despite any distortion due to camera perspective. Heating rates along each melt line are determined as described below:

Adiabatic wall temperature (T_{AW}) was determined. To obtain this, the ratio of adiabatic wall temperature to stagnation temperature (T_o) was calculated by:

$$\frac{T_{AW}}{T_o} = .867 + .133 \sin^{1.55} \delta$$

where: $\delta = \alpha + \theta$

α is the model angle of attack

θ is the surface deflection relative to the model centerline (usually zero or assumed zero)

This ratio, $\frac{T_{AW}}{T_o}$, is called the "recovery factor" (R_T). It represents the ratio of the free stream dynamic temperature recovered at the (model) wall.

DATA REDUCTION – (Continued)

Since T_O was measured, T_{AW} was determined from $\frac{T_{AW}}{T_O} \times T_O$.

Using T_{AW}, the value of the parameter $\bar{T}$ was calculated:

$$\bar{T} = \frac{T_{PC} - T_{IN}}{T_{AW} - T_{IN}}$$

where: T_{PC}= phase change paint melt temperature (°F)

T_{IN}= model initial temperature (°F)

T_{AW}= adiabatic wall temperature

Using $\bar{T}$, β is determined from an iterative solution of:

$$1 - \bar{T} = e\beta^2 (1 - \text{erf } \beta)$$

With β obtained from the above expression, the heat transfer coefficient (h) was determined from:

$$h = \frac{\beta\sqrt{K\rho C_p}}{\sqrt{t}}$$

Where K = thermal conductivity of the model material (BTU/FT-SEC-°F)

ρ= density of model material (lbm/ft^3)

C_p= specific heat of model material (BTU/lb-°F)

t= time in seconds

The aerodynamic heating rate $\dot{q}$ was calculated from $\dot{q} = h\ (T_{AW} - T_{PC})$.

The stagnation point heat transfer coefficient and heating rate are calculated using the equations below:

$$h_s = (.768)(C_p)(P_r)^{-.6}\ (\rho_W \mu_W)^{.1} (\rho_s \mu_s)^{.4} \sqrt{\frac{dVe}{dx}}$$

Where: $P_r = \frac{\mu C_P}{K}$ (μ, C_p and K for air)

ρ_W= air density along model wall (lbm/ft^3)

ρ_s= stagnation density (lbm/ft^3)

μ_W= air viscosity along model wall (lb$_m$/ft-sec)

μ_s= stagnation air viscosity (lb$_m$/ft-sec)

h_s= theoretical thin film heat transfer coefficient (BTU/ft^2-sec-°F)

and, $\frac{dVe}{dx} = \frac{1}{N_R} \sqrt{2RgT_o \left[1 - \frac{1}{P_1 P_2}\right]}$

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DATA REDUCTION – (Continued)

N_R = nose radius (Ft)

R = gas constant = $53.35 \left(\frac{Ft\text{-}lb_f}{lb_m - {}^\circ R} \right)$

g = gravitational constant = $32.2 \left(\frac{lb_m\ Ft}{lb_f\ sec^2} \right)$

T_o = stagnation temperature (°R)

$$P_{\infty} = \left[\frac{\gamma+1}{2} M^2 \right]^{\frac{\gamma}{\gamma-1}}$$

γ = ratio of specific heats (air)

M_∞ = free stream Mach number

$$P_2 = \left[\frac{\gamma + 1}{2\gamma M_\infty^2 - (\gamma - 1)} \right]^{\frac{1}{\gamma-1}}$$

The theoretical stagnation point heating rate ($\dot{q}_s$) is calculated from:

$$\dot{q}_s = h_s (T_{AW} - T_{PC})$$

Values of the material properties required for the data reduction were obtained from samples of the material actually used when casting the models. These values were obtained by a calibration lab, Dynatech, Inc., of Cambridge, Massachusetts.

Because each model had a slightly different set of $\sqrt{\rho C_p K}$ values, an average was used to ease the operational problems involved in having sets of data unique to each model. The following values were used in the data reduction for all models:

T_{PC} (°F)	$\sqrt{\rho C_p k}$ (BTU/FT^2 – SEC$^{\frac{1}{2}}$ –°F)
113	.0486
125	.0493
131	.0497
150	.0505
169	.0515

DATA REDUCTION - (Continued)

T_{PC} (°F)	$\sqrt{\rho C_p k}$ (BTU/FT^2 - SEC$^{\frac{1}{2}}$ - °F)
175	.0518
194	.0526
200	.0529
213	.0534
225	.0541
250	.0551
275	.0560
300	.0568
325	.0574
350	.0579
400	.0585
450	.0581
500	.0564
550	.0514

Data presented in this report were computed with two values of the recovery factor for each run. One value was intended for use with data on the top and two sides. The other value, associated with bottom (windward) surface data, was established as a function of angle of attack. The values used are given below:

	Recovery Factor (T_{AW}/T_o)	
Angle of Attack	Windward View	Sides and Upper Surface Views
20	.892	.90
25	.902	.90
30	.912	.90
35	.934	.90
40	.934	.90
45	.945	.90

The data presented in this report are contour plots which show isotherms for selected frames of data and corresponding tabulated data. Under the heading "GROUP" is the run number. There are contour plots of four

camera views, top, bottom, and two sides. (Since the model was installed in an inverted position, the top camera recorded the orbiter bottom surface.) Many runs do not have all views presented because tracings were made only when significant data were recorded.

The extreme left column of the listings indicate the camera view associated with the data; "TOP" indicates orbiter bottom surface (windward data), "OS" indicates pilot's right, "NOS" the pilot's left, and "BOT" indicates the orbiter top side, which was photographed by the bottom camera.

The column headed "PIC NO" gives the frame numbers, which can be found on the tracings corresponding to various isotherms. The data user can match a drawn isotherm from the data tracings to a computed H(To)/HREF in the tab listings.

Statements made below on data uncertainty are based on information for a previous paint test in the AEDC Tunnel B. This information was presented in Reference 2, AEDC-DR-73-27, by W. R. Martindale (ARO, Inc.). Since uncertainties of measurement techniques and parameters from one test to the other are estimated to be identical, these statements are applicable.

Uncertainties of the basic tunnel parameters were estimated from repeat calibrations of the P_o and T_o instruments and from the repeatability and uniformity of the tunnel flow during calibrations. The parameters P_o, T_o, and Mach number with their uncertainties were then used to compute the uncertainties in the other parameters dependent on these by the Taylor

series method of error propagation.

Parameter	Uncertainty (percent)
Mach No.	± 0.3
P_o	± 0.5
T_o	± 0.5
R_e/ft	± 1.2

An accurate statement on the precision of the data is impossible because it is up to the judgment of the film reader as to where to trace the paint melt line for a specific frame. A statement is possible for the heat transfer coefficient, H, on the tab data, however. This heat transfer coefficient is computed from an equation and is a function of Δt, $\sqrt{\rho C_p k}$ T_i, T_{AW}, and T_{PC}.

Parameter	Uncertainty (percent)
Δt	± 1.0
$\sqrt{\rho C_p k}$	±10.0
T_i	± 0.5
T_o (T_{AW})	± 1.0
T_{PC}	± 0.5

It should be noted that the above uncertainties in T_{PC} and T_{AW} are only the nominal measurement uncertainties. As mentioned above, T_{PC} is affected by where the melt line is judged to be when tracking. T_{AW} is dependent on the correctness of the assumption for the value of the recovery factor.

However, using the above listed uncertainties with the equation for the heat transfer coefficient H and taking the square root of the sum of the squares, the following uncertainties for H are determined:

H uncertainty $\approx$ 13% for T_{PC} 200°F

H uncertainty $\approx$ 11% for T_{PC} 200°F

REFERENCES

1. Cummings, J., and Dye, W. H., "Pretest Information for Phase Change Paint Tests on .040 scale 50% Forebody Models of the Rockwell International Space Shuttle Orbiter in the AEDC "B" Hypersonic Wind Tunnel, OH-50A," SD74-SH-0090, dated February 5, 1974.

2. Martindale, W. R., "Test Results from the NASA/Rockwell International Space Shuttle Test (OH-4C) conducted in the AEDC-VKF Tunnel B," AEDC-DR-73-27, dated November 8, 1973.

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TABLE I
PHASE CHANGE COATING TEST DATA SUMMARY SHEET

TEST TITLE: 50% FOREBODY MODELS

TEST NUMBER: OH 50A TEST FACILITY: AEDC B

TEST DATE: 3/29/74 & 4/10/74 TEST ENGINEER: M. QUAN

Run No.	Model Configuration Identification	Model Scale	Free Stream Mach Number	Total Pressure (psia)	Total Temp. (^{o}F)	$\frac{T_{aw}*}{T_{total}}$	$\frac{RNX10^{6}}{Ft}$	Phase Change Temp. (^{o}F) Top/Bottom	Model Position (degrees) α	Model Position (degrees) β		Camera** location (in) X	Camera** location (in) Y	Camera** location (in) Z
1	S (SMOOTH)	.04	8	110	780		0.5	113	30	0				
2	P (PROTUBERANCES)	↓	↓	↓	↓	↓	↓	113	30	0				
3	S							113	30	-1				
4	S							150	30	0				
5	P							150	30	0				
6	P							113	30	-1				
7	S							113	25	0				
8	P							113	30	+1				
9	S							150	25	0				
10	S							113	25	-1				
11	P							113	25	0				
12	P							150	25	0				
13	S	↓	↓	↓	↓		↓	113	20	0				

** X axis parallel to stream (+downstream, -upstream)
Y axis (+right, -left, as viewed from the rear)
Z axis (+up, -down)

* T_{aw} = adiabatic wall temperature

TABLE I – (Continued.)
PHASE CHANGE COATING TEST DATA SUMMARY SHEET

TEST TITLE: 50% FOREBODY MODELS

TEST NUMBER: OH 50A TEST FACILITY: AEDC B

TEST DATE: 3/29/74 & 4/10/74 TEST ENGINEER: M. QUAN

Run No.	Model Configuration Identification	Model Scale	Free Stream Mach Number	Total Pressure (psia)	Total Temp. (°F)	$\frac{T_{aw}*}{T_{total}}$	$\frac{RNX10^6}{Ft}$	Phase Change Temp. (°F) TOP/BOTTOM	Model Position (degrees)			Camera** Location (in)		
									α	β		X	Y	Z
14	S	.04	8	110	780		0.5	150	20	0				
15	P	↓	↓	↓	↓		↓	113	25	-1				
16	P							113	25	+1				
17	P							113	20	0				
18	P			↓	↓		↓	150	20	0				
19	S			210	810		1.0	113	30	0				
20	P			↓	↓		↓	113/169	30	0				
21	S							113/169	25	0				
22	P							113/169	25	0				
23	P							113/169	30	-1				
24	S			↓	↓		↓	169	30	0				
25	P			425	830		2.0	125/200	30	0				
26	S	↓	↓	↓	↓		↓	125/200	30	0				

** X axis parallel to stream (+downstream, -upstream)
Y axis (+right, -left, as viewed from the rear)
Z axis (+up, -down)

* T_{aw} = adiabatic wall temperature

TABLE I – (Continued)
PHASE CHANGE COATING TEST DATA SUMMARY SHEET

TEST TITLE: 50% FOREBODY MODELS

TEST NUMBER: OH 50A TEST FACILITY: AEDC B

TEST DATE: 3/29/74 & 4/10/74 TEST ENGINEER: M. QUAN

Run No.	Model Configuration Identification	Model Scale	Free Stream Mach Number	Total Pressure (psia)	Total Temp. (°F)	$\frac{T_{aw}*}{T_{total}}$	$\frac{RNX10^6}{Ft}$	Phase Change Temp. (°F) TOP/BOTTOM	Model Position (degrees)			Camera** Location (in)		
									α	β		X	Y	Z
27	P	.04	8	425	830		2.0	131/300	30	0				
28	S			210	810		1.0	113/169	35	0				
29	P							113/175	35	0				
30	P							113/175	35	-1				
31	S							113	35	-1				
32	P							113	35	+1				
33	P							113/175	30	+1				
34	S							113	30	-1				
35	P							113/175	25	+1				
36	P							113/175	25	-1				
37	S							113	25	-1				
38	P							113/150	20	0				
39	S							113/150	20	0				

** X axis parallel to stream (+downstream, -upstream)
Y axis (+right, -left, as viewed from the rear)
Z axis (+up, -down)

* T_{aw} = adiabatic wall temperature

TABLE I – (Continued)
PHASE CHANGE COATING TEST DATA SUMMARY SHEET

TEST TITLE: 50% FOREBODY MODELS

TEST NUMBER: OH 50A TEST FACILITY: AEDC B

TEST DATE: 3/29/74 & 4/10/74 TEST ENGINEER: M. QUAN

Run No.	Model Configuration Identification	Model Scale	Free Stream Mach Number	Total Pressure (psia)	Total Temp. (^{o}F)	$\frac{T_{aw}*}{T_{total}}$	RNX10^{6}/Ft	Phase Change Temp. (^{o}F) TOP/BOTTOM	Model Position (degrees) α	Model Position (degrees) β	Camera** Location (in) X	Y	Z
40	S	.04	8	210	810		1.0	113/194	40	0			
41	P	↓	↓	↓	↓		↓	113/194	40	0			
42	P							113/194	45	0			
43	S			↓	↓		↓	113/194	45	0			
44	P			320	820		1.5	125/194	30	0			
45	S			↓	↓		↓	125/194	30	0			
46	P			↓	↓		↓	131/250	30	0			
47	S			425	830		2.0	131/225	25	0			
48	P			↓	↓		↓	131/250	25	0			
49	P							131/275	30	0			
50	S							131/225	30	0			
51	P							131/250	20	0			
52	S	↓	↓	↓	↓		↓	131/225	20	0			

** X axis parallel to stream (+downstream, -upstream)
Y axis (+right, -left, as viewed from the rear)
Z axis (+up, -down)

* T_{aw} = adiabatic wall temperature

TABLE I – (Continued)
PHASE CHANGE COATING TEST DATA SUMMARY SHEET

TEST TITLE: 50% FOREBODY MODELS

TEST NUMBER: OH 50A TEST FACILITY: AEDC B

TEST DATE: 3/29/74 & 4/10/74 TEST ENGINEER: M. QUAN

Run No.	Model Configuration Identification	Model Scale	Free Stream Mach Number	Total Pressure (psia)	Total Temp. (°F)	$\frac{T_{aw}*}{T_{total}}$	$\frac{RNX10^6}{Ft}$	Phase Change Temp. (°F) TOP/BOTTOM	Model Position (degrees) α	Model Position (degrees) β	Camera** Location (in) X	Camera** Location (in) Y	Camera** Location (in) Z
53	S	.04	8	425	830		2.0	131/225	35	0			
54	P	↓	↓	↓	↓		↓	131/300	35	0			
55	S							131/250	40	0			
56	S							131/275	45	0			
57	P							131/350	40	0			
58	P			↓	↓		↓	131/400	45	0			
59	S			210	810		1.0	113/175	30	-2			
60	P			↓	↓		↓	113/175	30	-2			
61	S							OIL FLOW	30	0			
62	S							OIL FLOW	20	0			
63	P							OIL FLOW	30	0			
64	P							OIL FLOW	20	0			
65	S	↓	↓	↓	↓		↓	OIL FLOW	45	0			

** X axis parallel to stream (+downstream, -upstream)
Y axis (+right, -left, as viewed from the rear)
Z axis (+up, -down)

* T_{aw} = adiabatic wall temperature

TABLE I – (Concluded)
PHASE CHANGE COATING TEST DATA SUMMARY SHEET

TEST TITLE: 50% FOREBODY MODELS

TEST NUMBER: OH 50A TEST FACILITY: AEDC B

TEST DATE: 3/29/74 & 4/10/74 TEST ENGINEER: M. QUAN

SHEET 6 OF 6

Run No.	Model Configuration Identification	Model Scale	Free Stream Mach Number	Total Pressure (psia)	Total Temp. (°F)	$\frac{T_{aw}*}{T_{total}}$	$\frac{RNX10^6}{Ft}$	Phase Change Temp. (°F)	Model Position (degrees)			Camera** Location (in)		
									α	β		X	Y	Z
66	P	.04	8	210	810		1.0	OIL FLOW	45	0				

** X axis parallel to stream (+downstream, -upstream)
Y axis (+right, -left, as viewed from the rear)
Z axis (+up, -down)

* T_{aw} = adiabatic wall temperature

TABLE II

MODEL COMPONENT : BODY - B_{60}

GENERAL DESCRIPTION : Fifty per cent orbiter forebody, Vehicle 140C.

NOTE: This body includes a small portion of the wing glove.

MODEL SCALE: 0.040

DRAWING NUMBER : VL70-000140 C

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length	645.15	26.81
Max Width	330.00	13.20
Max Depth		
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

TABLE II (Concluded)

MODEL COMPONENT : CANOPY - C_{10}

GENERAL DESCRIPTION : Configuration 4 canopy and windshield as used with B_{25}, six glass panes in windshield.

MODEL SCALE: 0.040

DRAWING NUMBER : VL70-000140B, -140C, -202B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X_0 = 434.643 to 670), In.	235.357	9.414
Max Width		
Max Depth	28.00	1.12
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		
Nose/windshield intersection, X_0 = 434.643		17.486

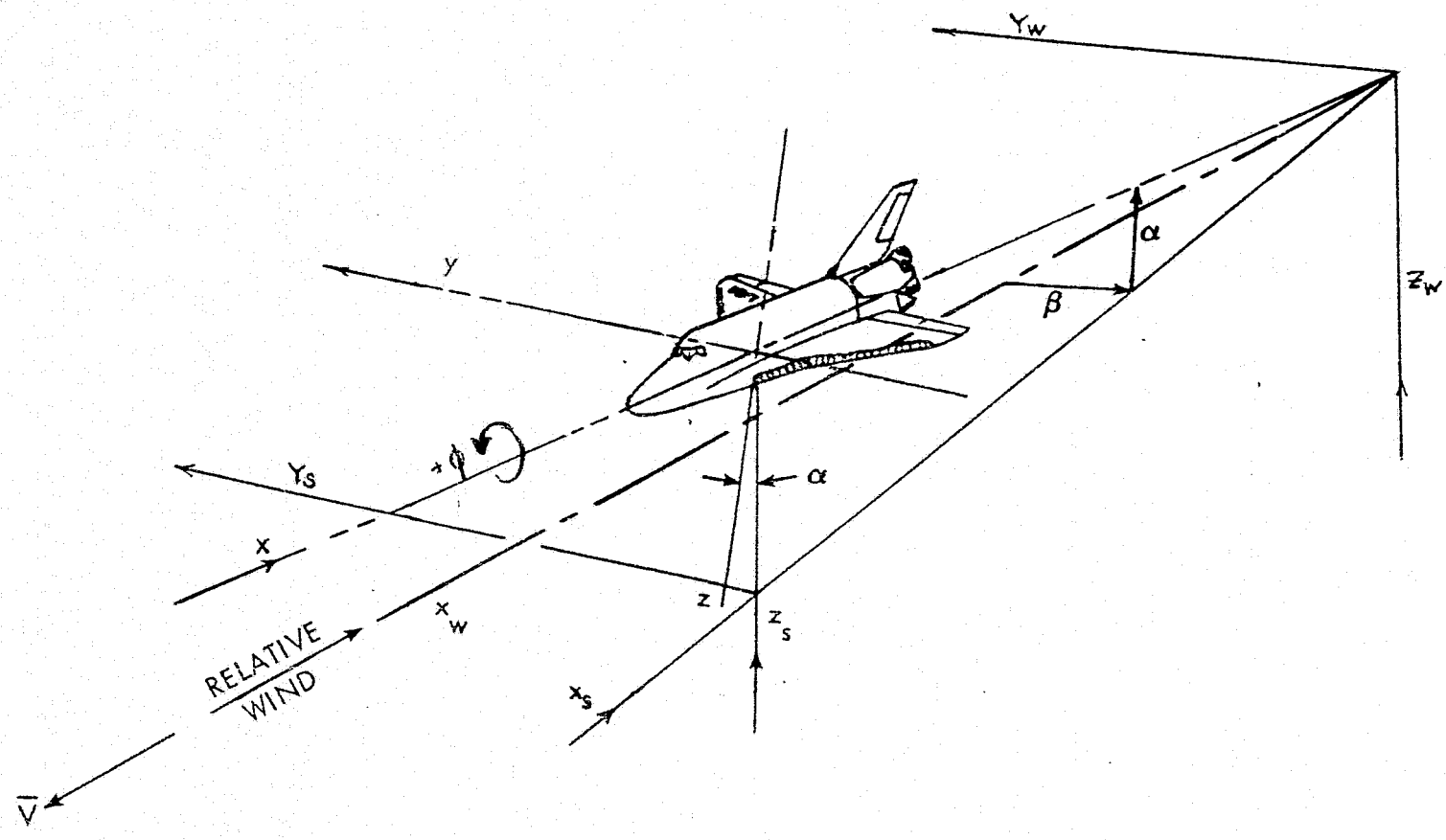


Figure 1. - Axis Systems.

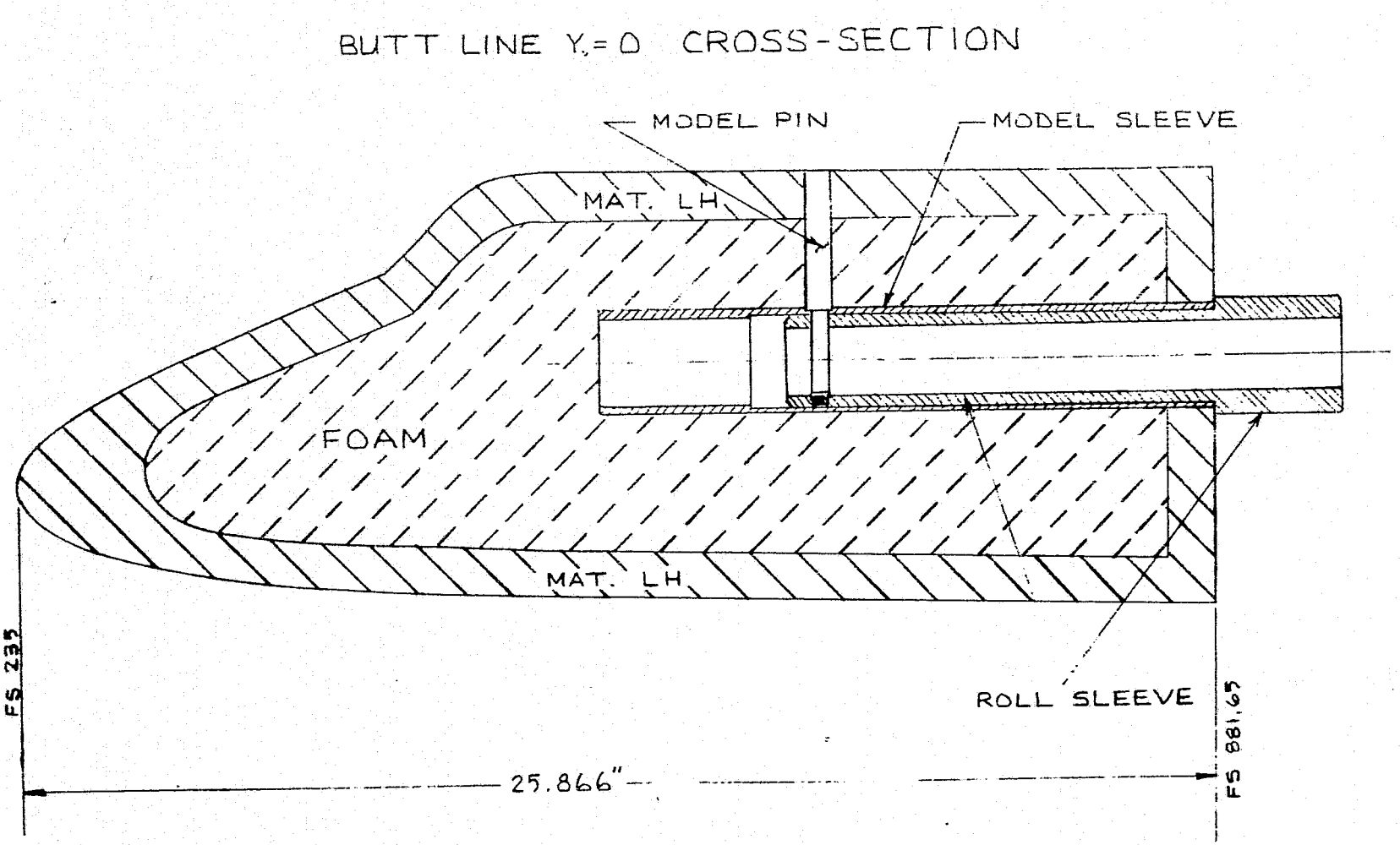


Figure 2. - Model Cross Section.

Figure 3. - Paint Stripe Pattern.

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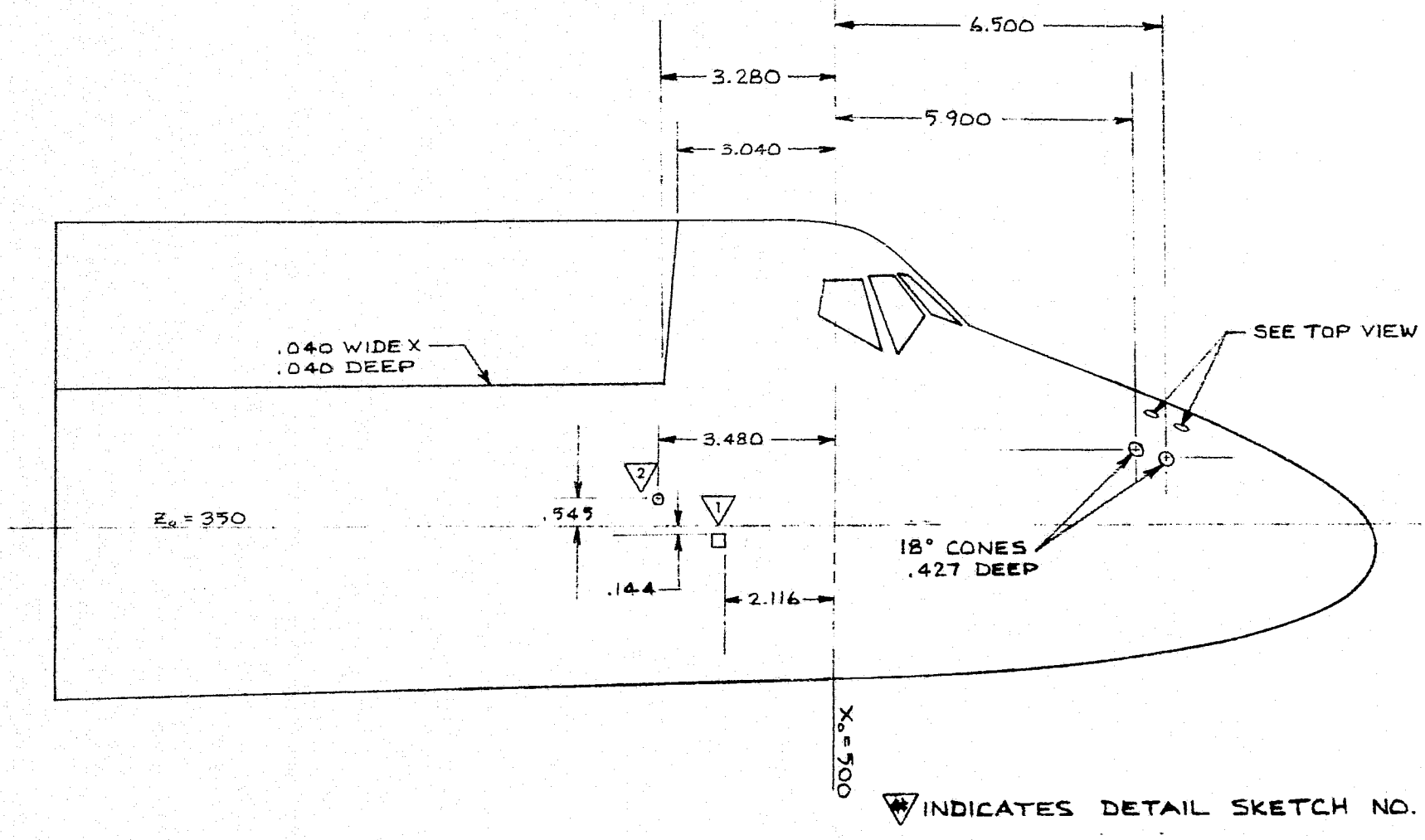


Figure 4. - Starboard Side Protuberances and Cavities.

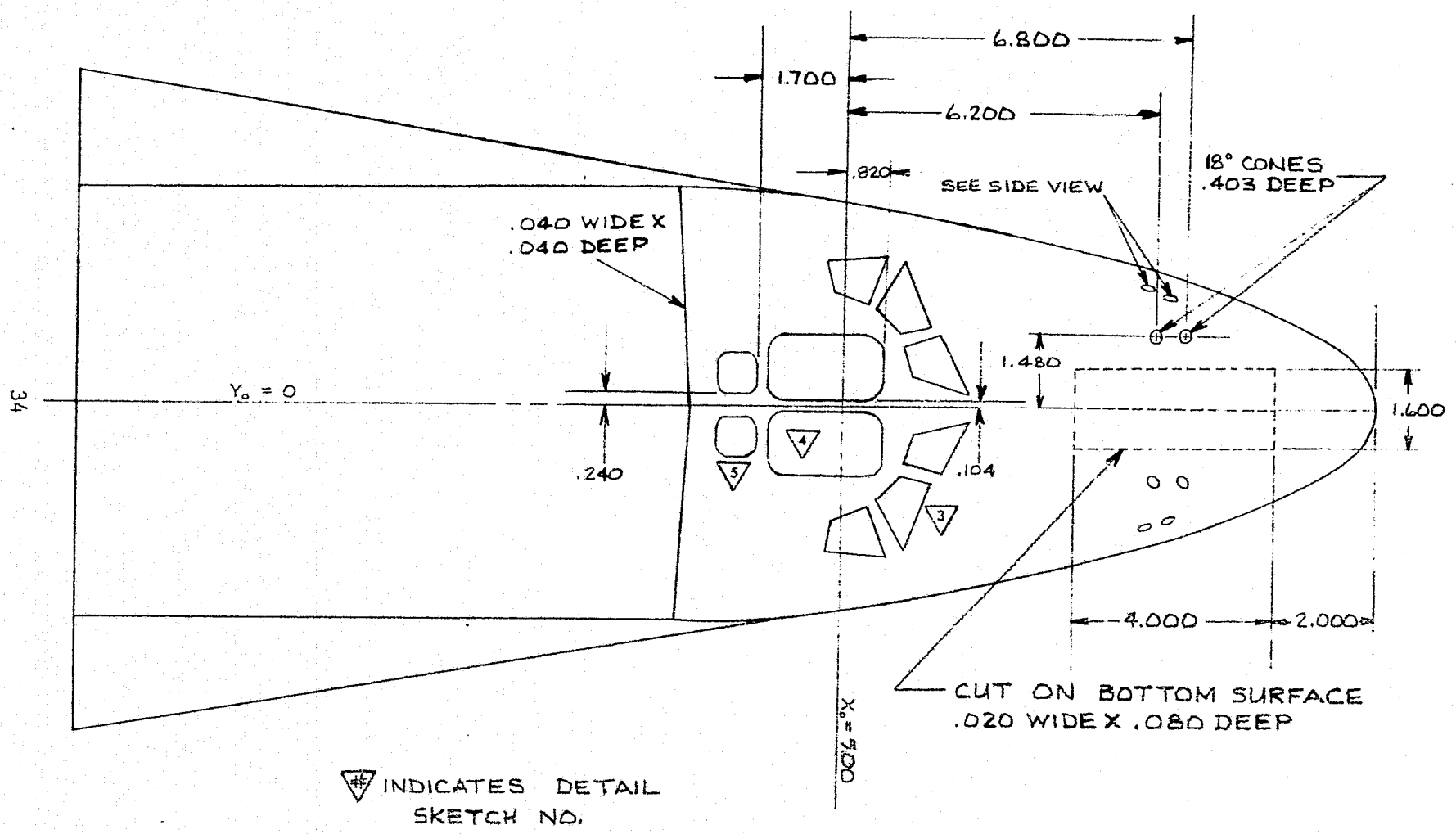


Figure 5. - Top View Protuberances and Cavities.

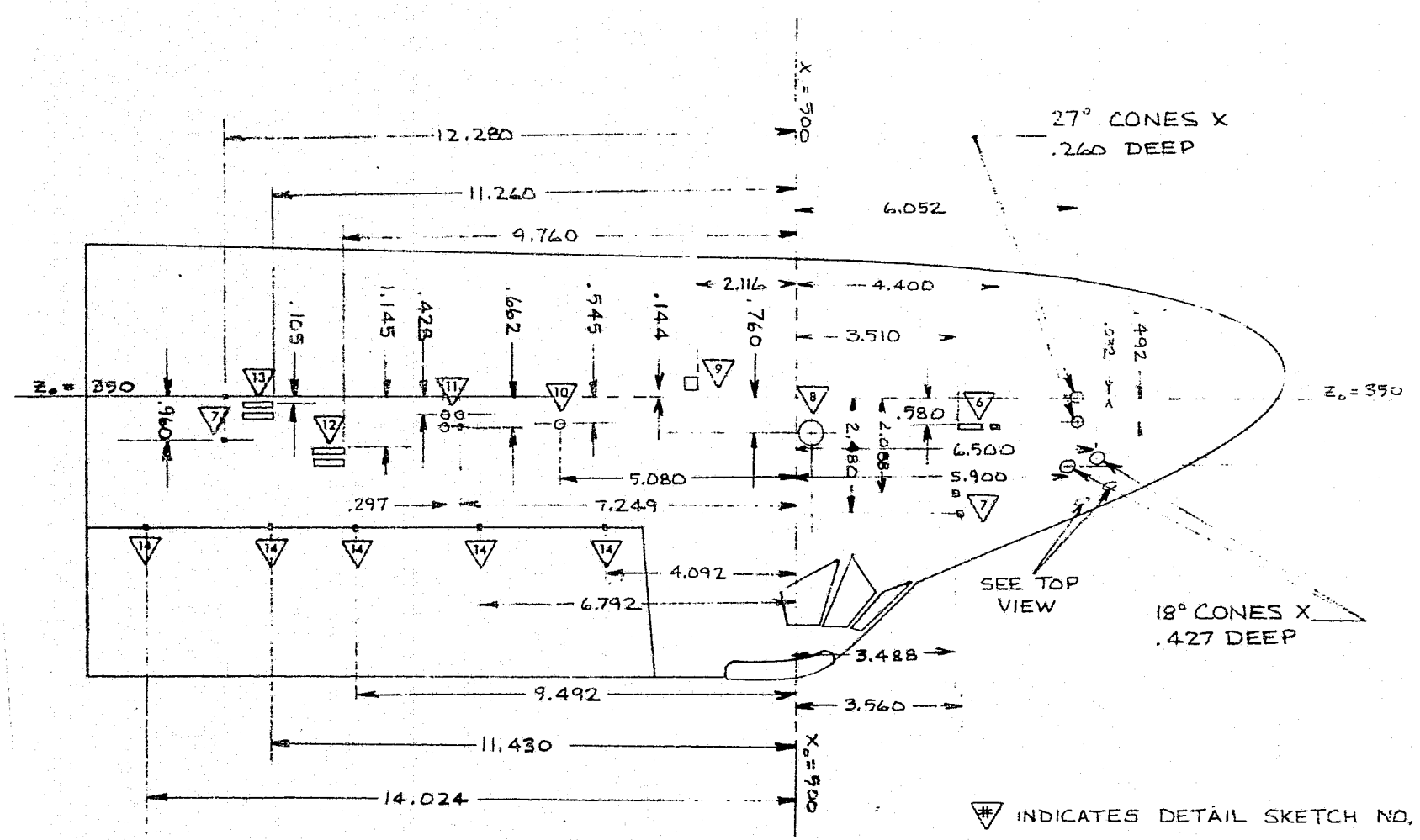
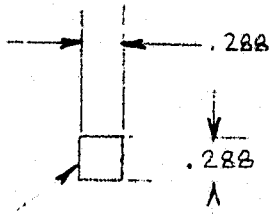


Figure 6. - Port Side Protuberances and Cavities.

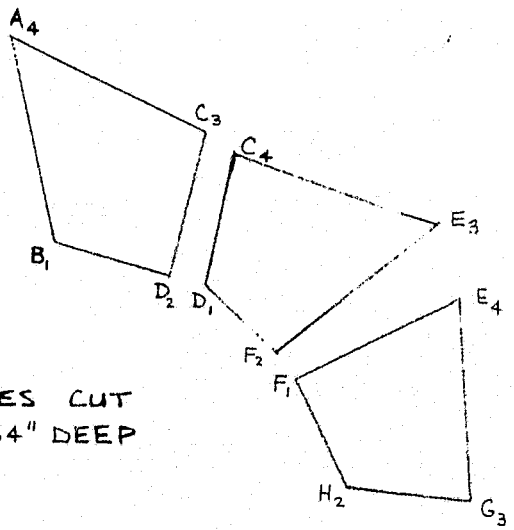
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(1) FUSELAGE CAVITY VENT



(2) SUBLIMATOR VENT RIGHT SIDE



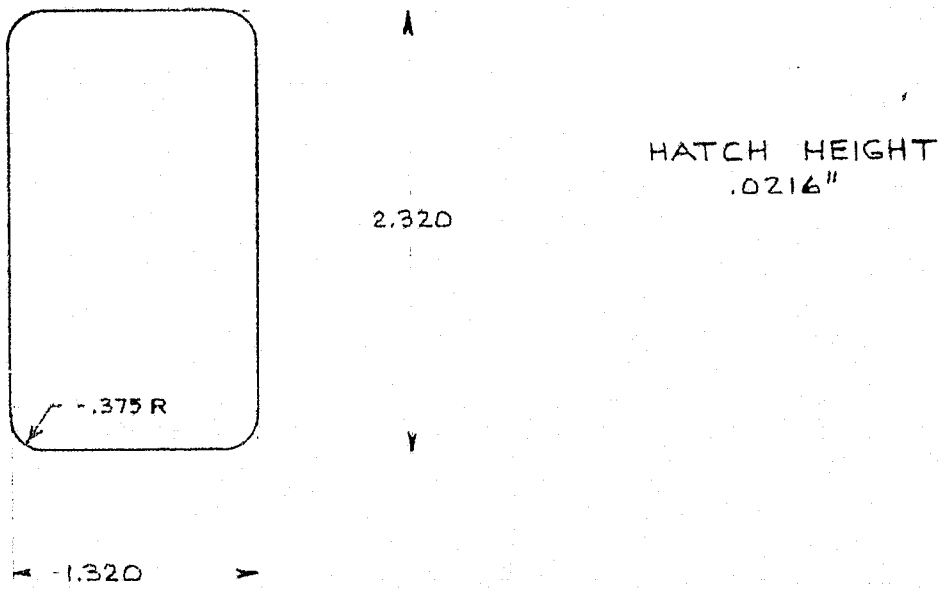
WINDOW PANE COORD.

	X	Y	Z
B_1	1.418	0.546	4.997
D_2	1.219	1.191	4.959
C_3	1.898	1.401	4.164
A_4	2.531	0.269	3.931
D_1	1.150	1.402	4.915
F_2	0.667	1.897	4.909
E_3	1.241	2.891	3.419
C_4	1.760	1.576	4.166
F_1	0.923	2.033	4.895
H_2	-0.195	2.295	4.886
G_3	-0.315	2.914	4.156
E_4	0.906	3.032	3.456

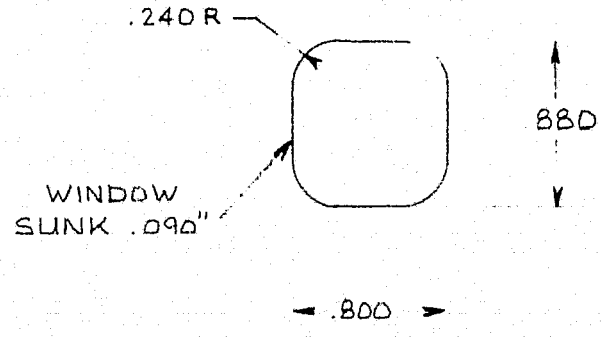
NOTE : X MEAS. FWD. FROM X_0=500
Y MEAS. OUT FROM Y_0=0.0
Z MEAS. UP FROM Z_0=350

(3) WINDSHIELD

Figure 7. - Detail Sketches.
(1 of 5)

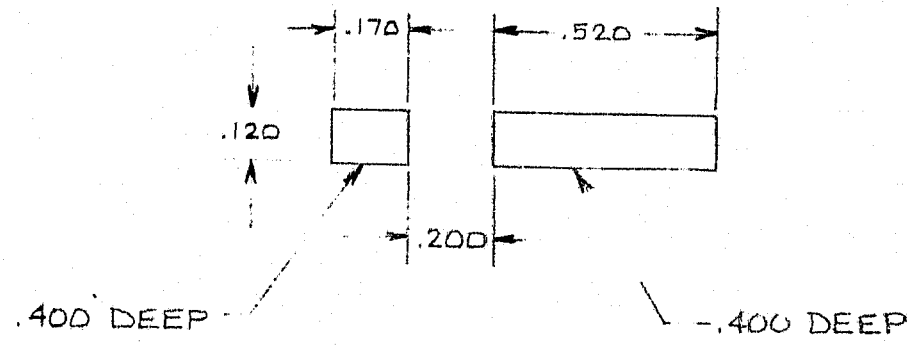


4 ESCAPE HATCH

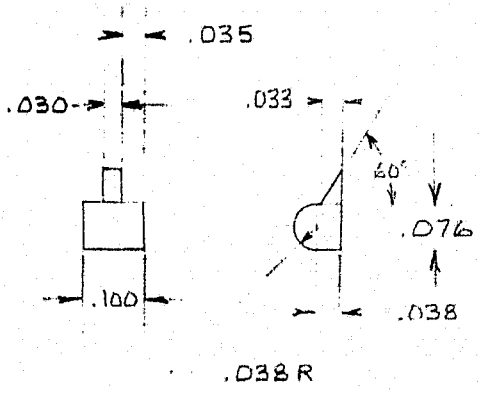


5 UPPER OBSERVATION WINDOW

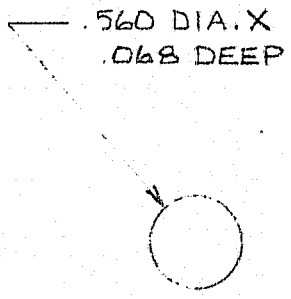
Figure 7. - Detail Sketches.
(2 of 5)



6 RCS TANK COMPARTMENT AND RCS THRUSTER VENTS

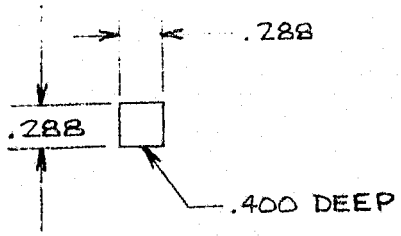


7 PREFLIGHT ACCESS AND STAR TRACKER DOOR HINGES

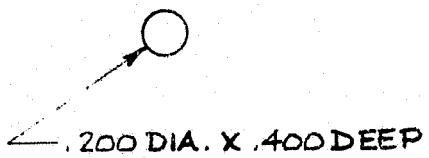


8 HATCH WINDOW

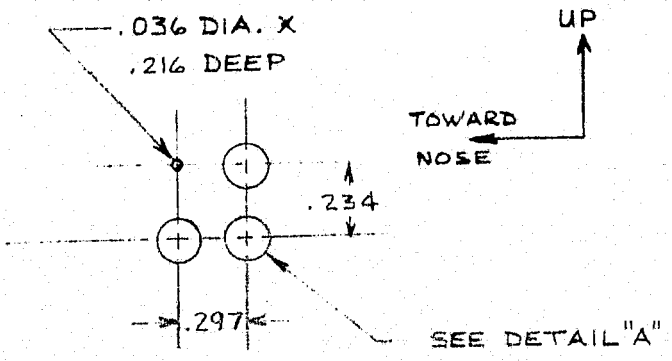
Figure 7. - Detail Sketches.
(3 of 5)

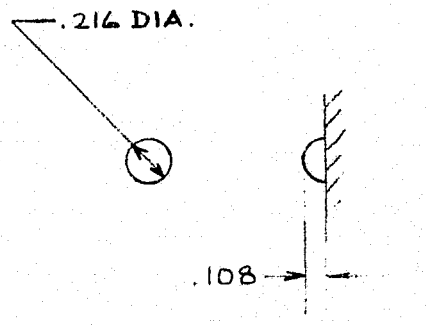


9 FUSELAGE CAVITY VENT



10 SUBLIMATOR VENT LEFT SIDE

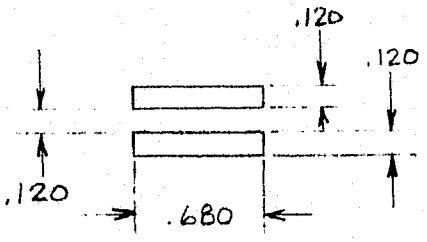




DETAIL "A"
(TYPICAL 3 PLACES)

11 VENTS

Figure 7. - Detail Sketches.
(4 of 5)

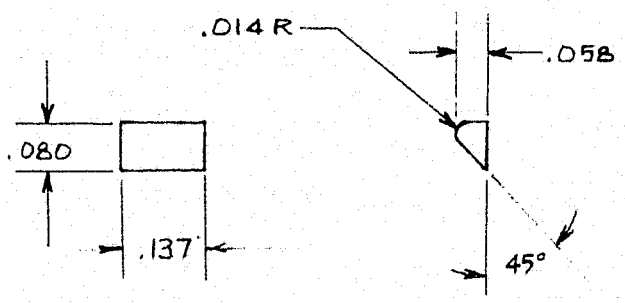


(12) IS .520 DEEP

(13) IS .400 DEEP

(12) CARGO BAY VENT

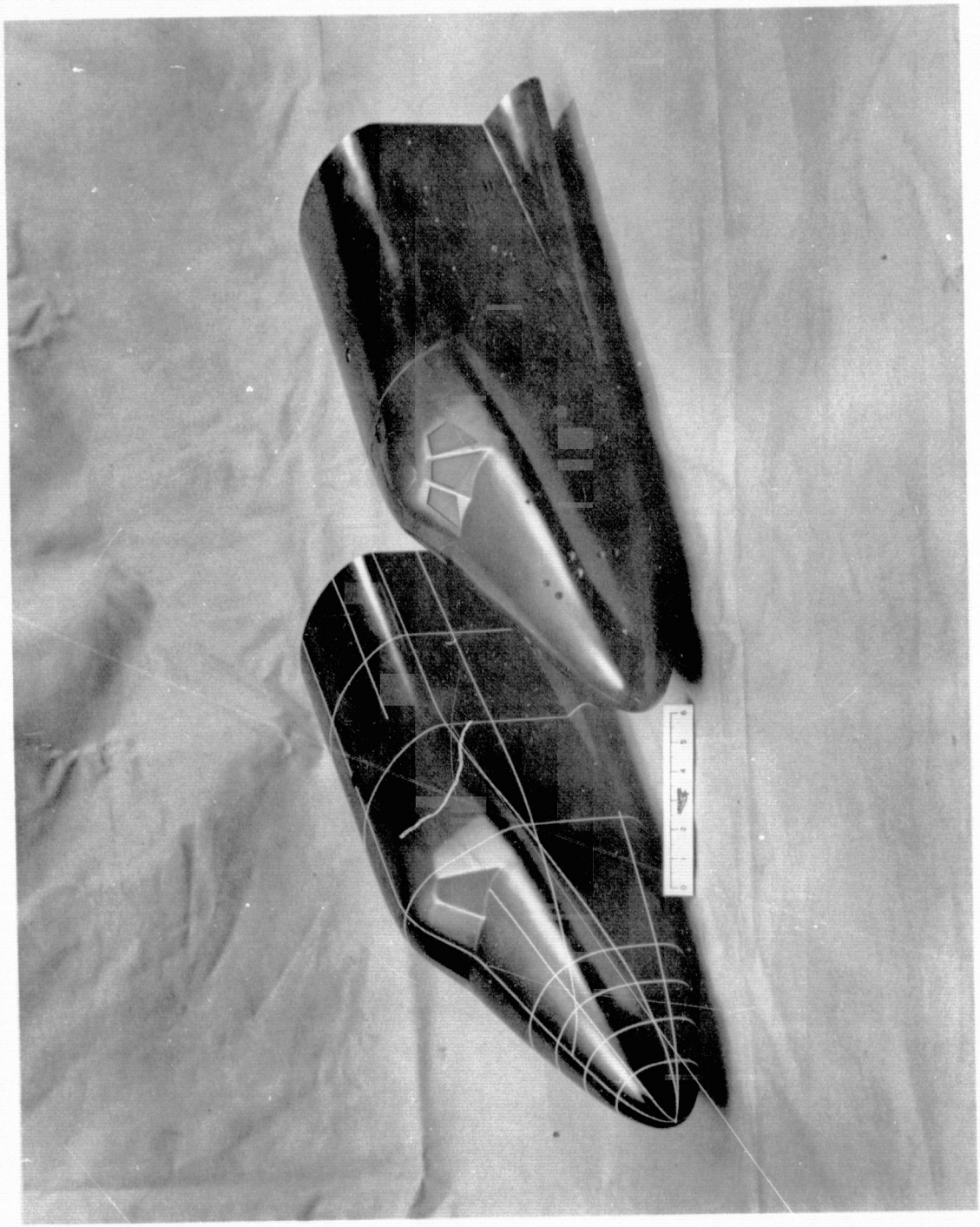
(13) MID FUSELAGE VENT



(14) CARGO BAY DOOR HINGES

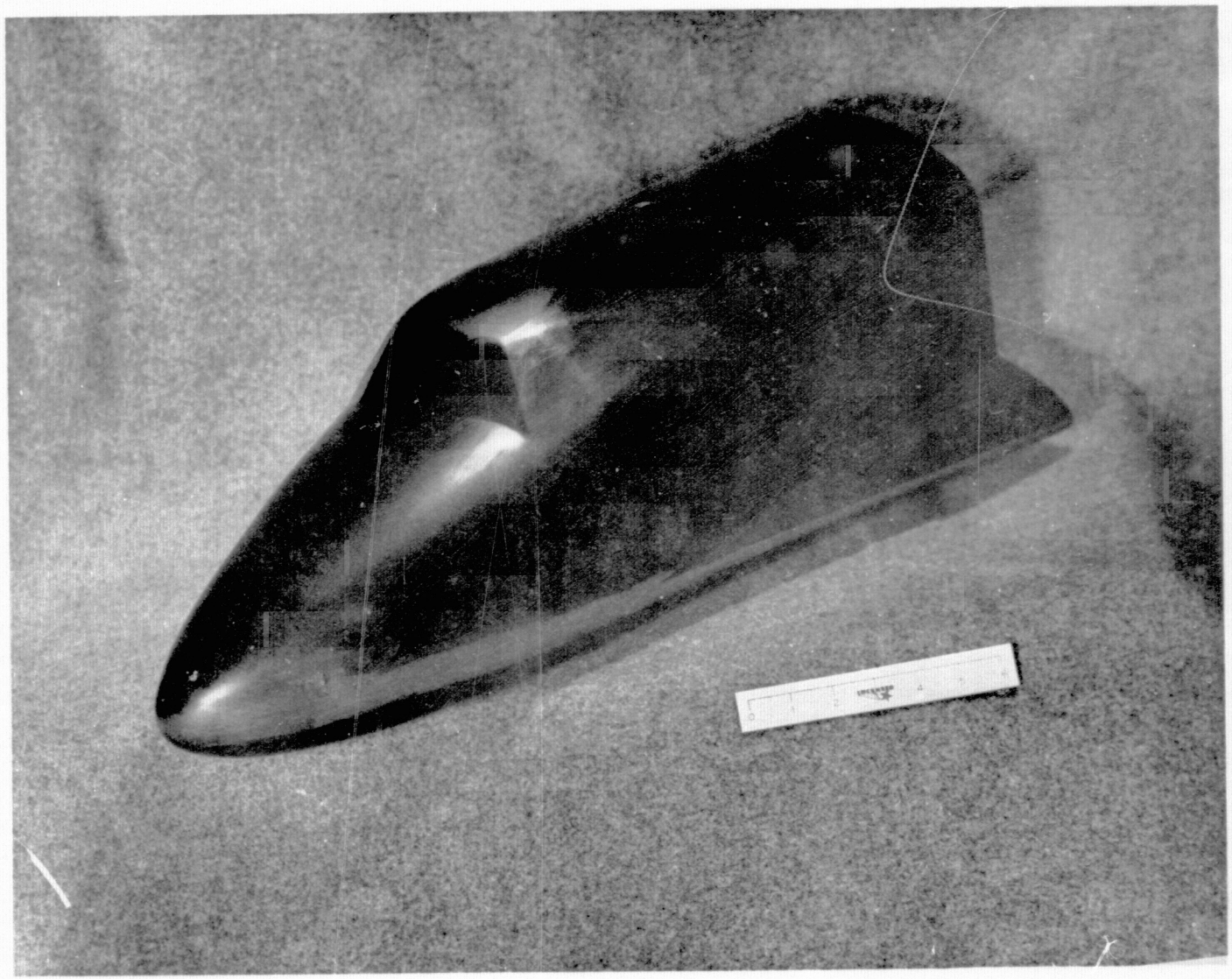
Figure 7. - Detail Sketches.
(5 of 5)

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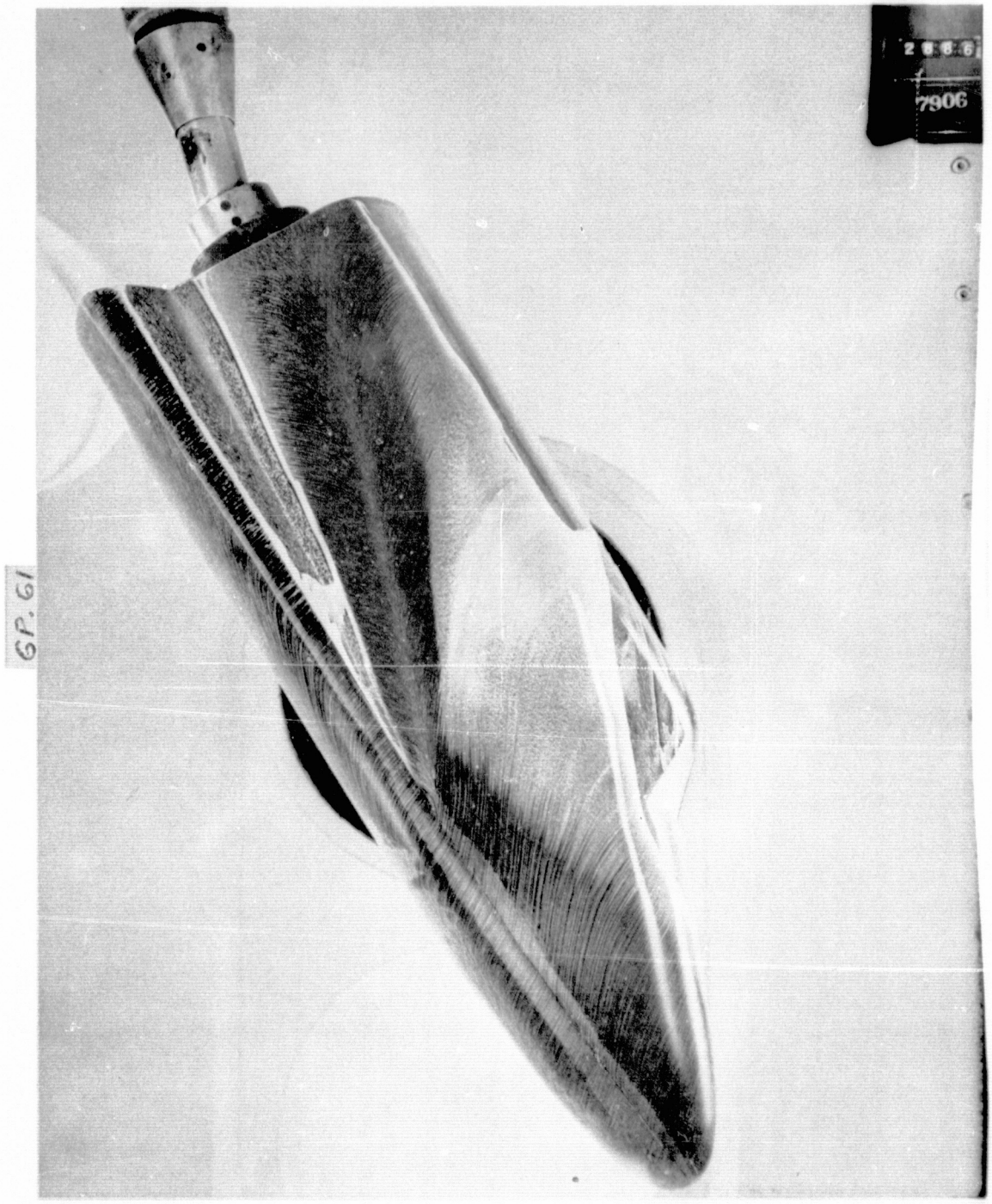
(a) Paint Stripe and Protuberance Models

Figure 8. - Model Photographs.



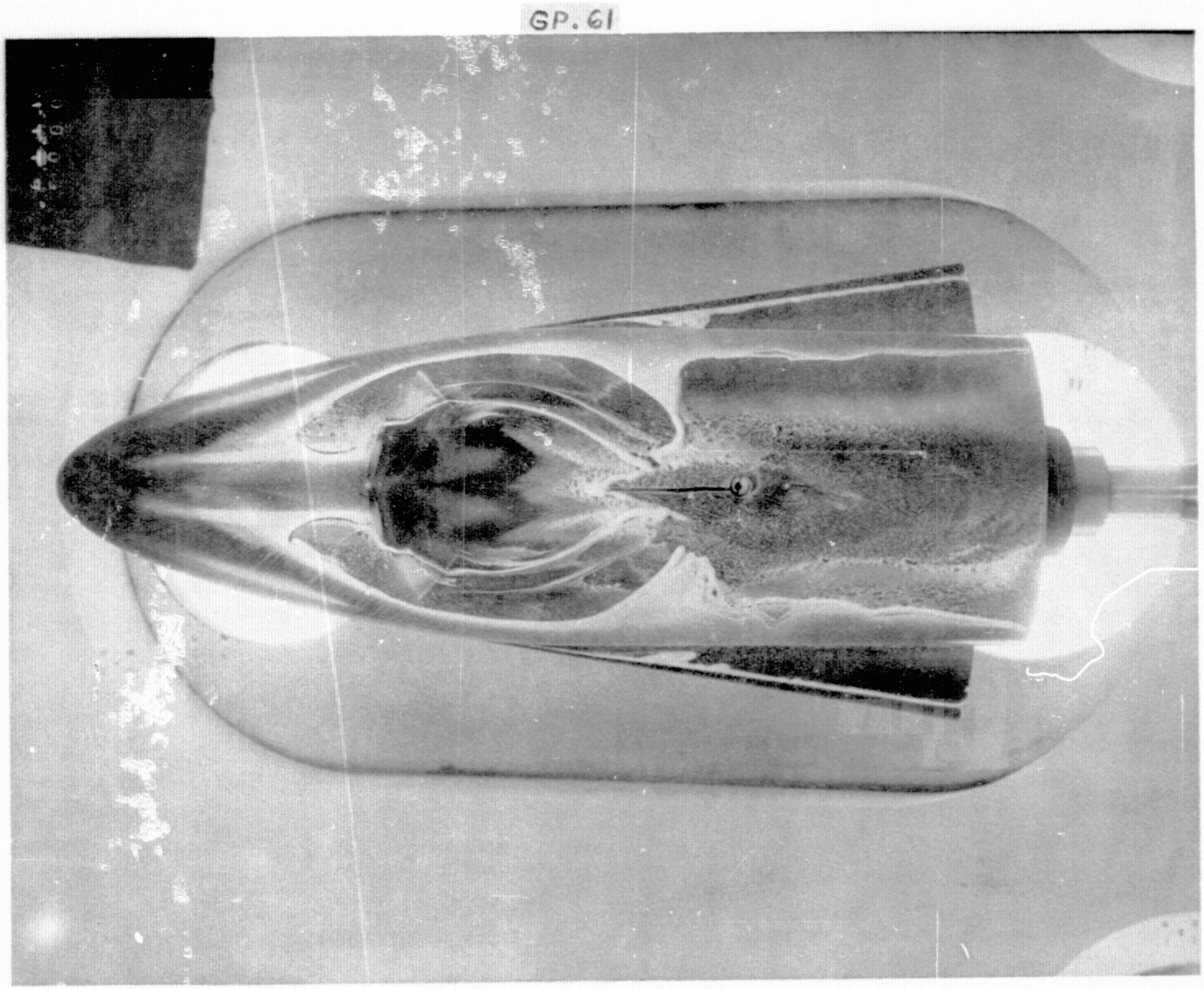
(b) Smooth Model
Figure 8. - Continued.

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(c) Photograph of oil flow pattern on model right side from Group 61.

Figure 8. - Continued.



(d) Photograph of oil flow pattern on model top from Group 61.

Figure 8. - Continued.

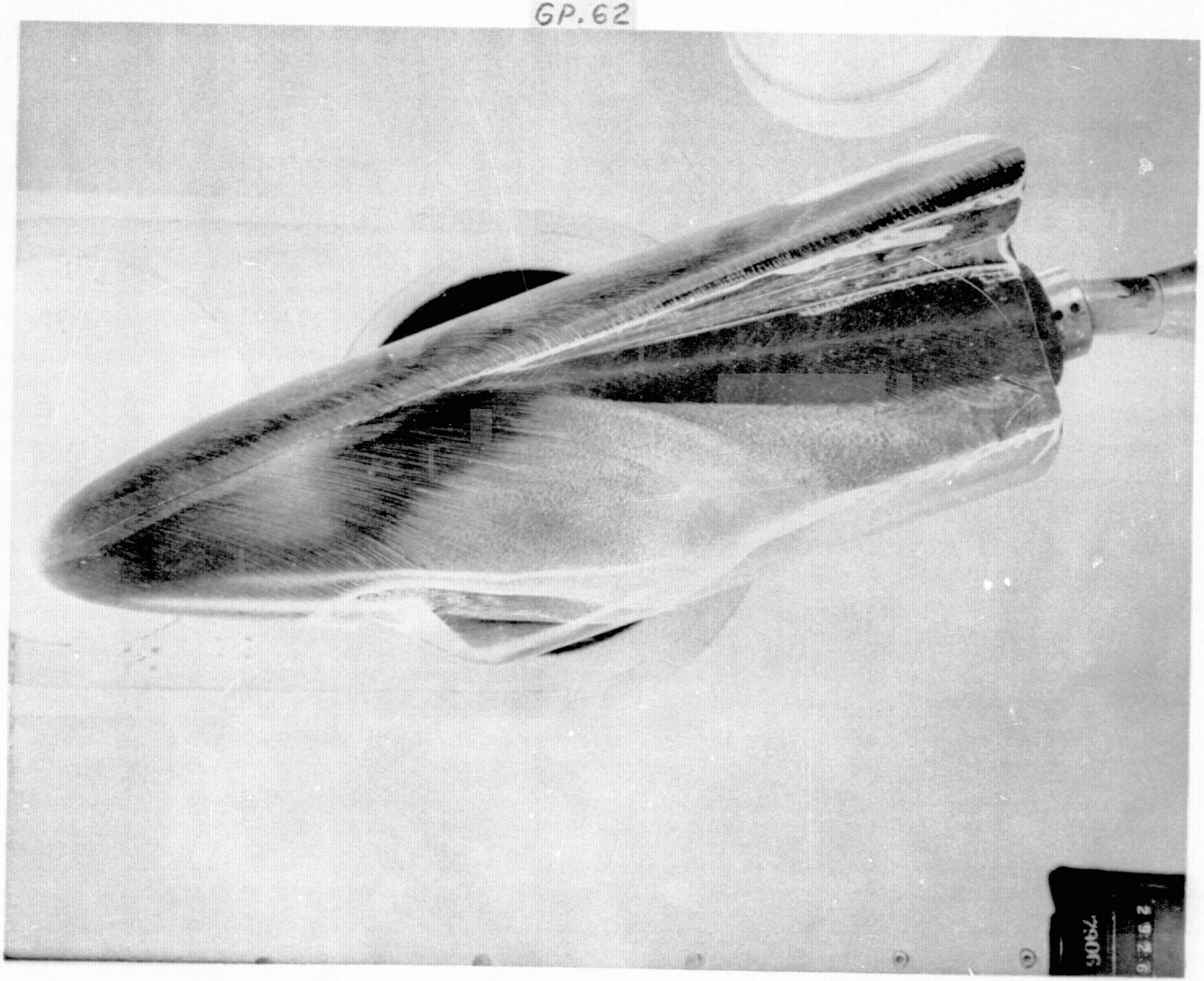
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(e) Photograph of oil flow pattern on model left side from Group 61.

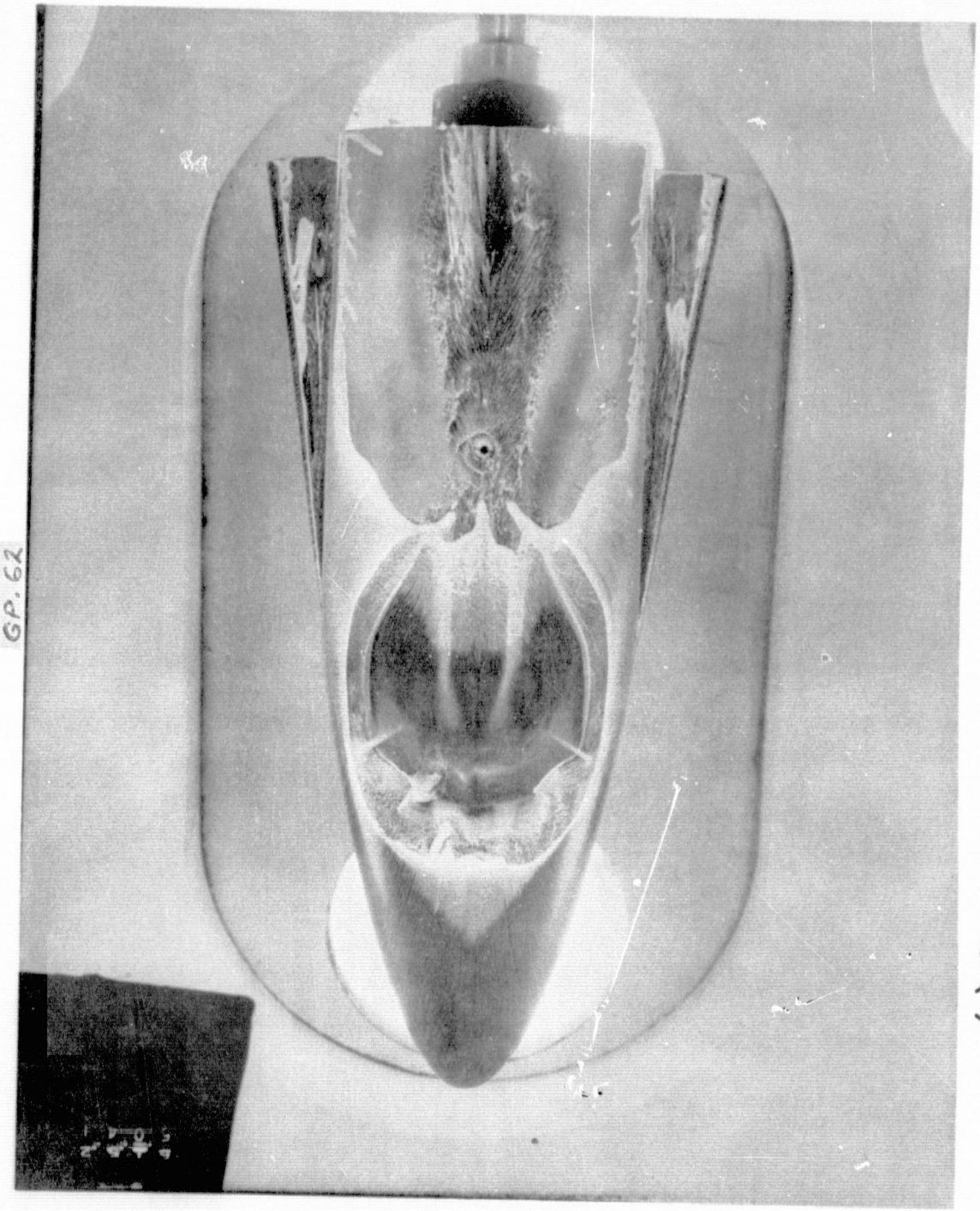
Figure 8. - Continued.

GP.62



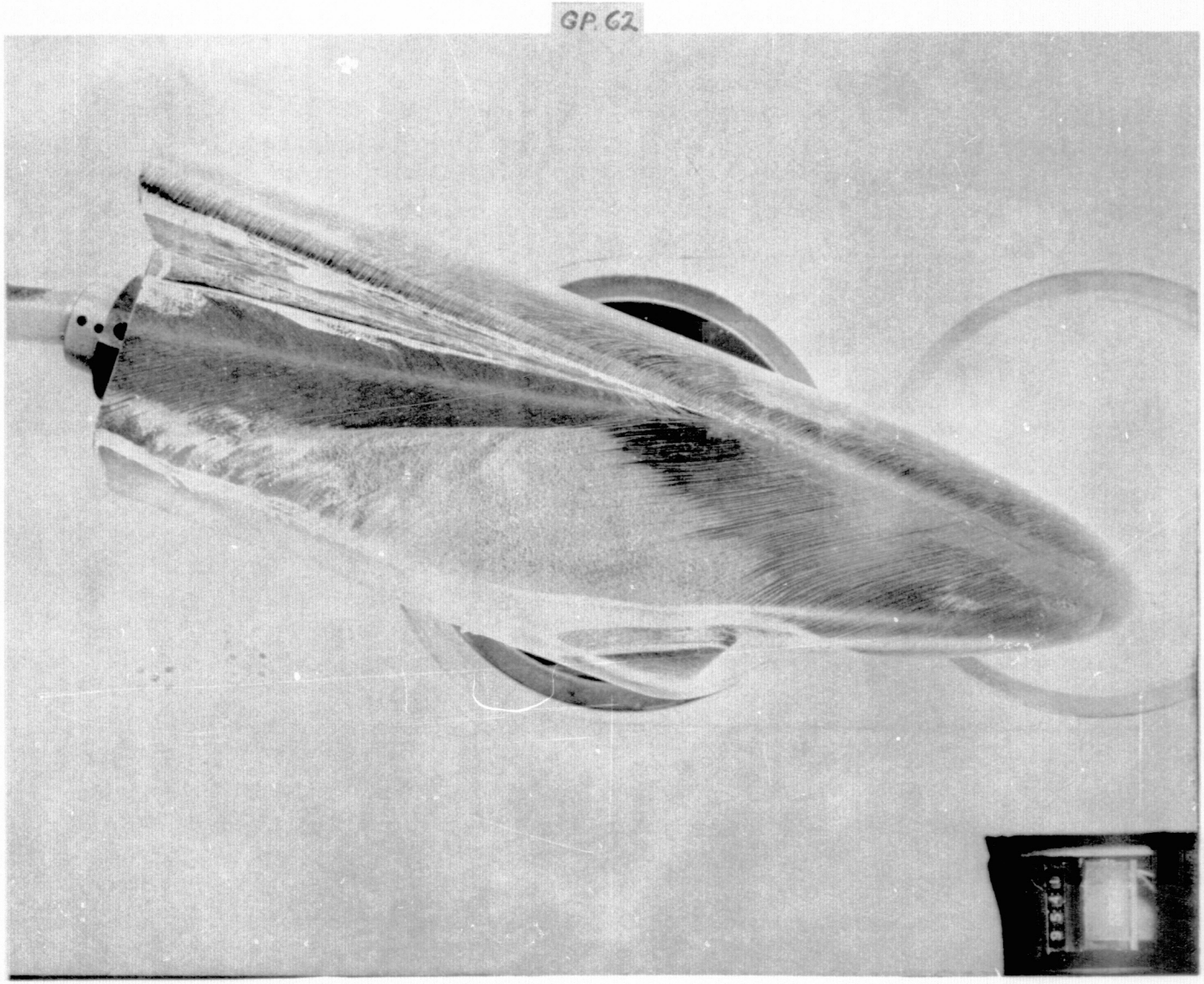
(f) Photograph of oil flow pattern on model right side from Group 62.
Figure 8. - Continued.

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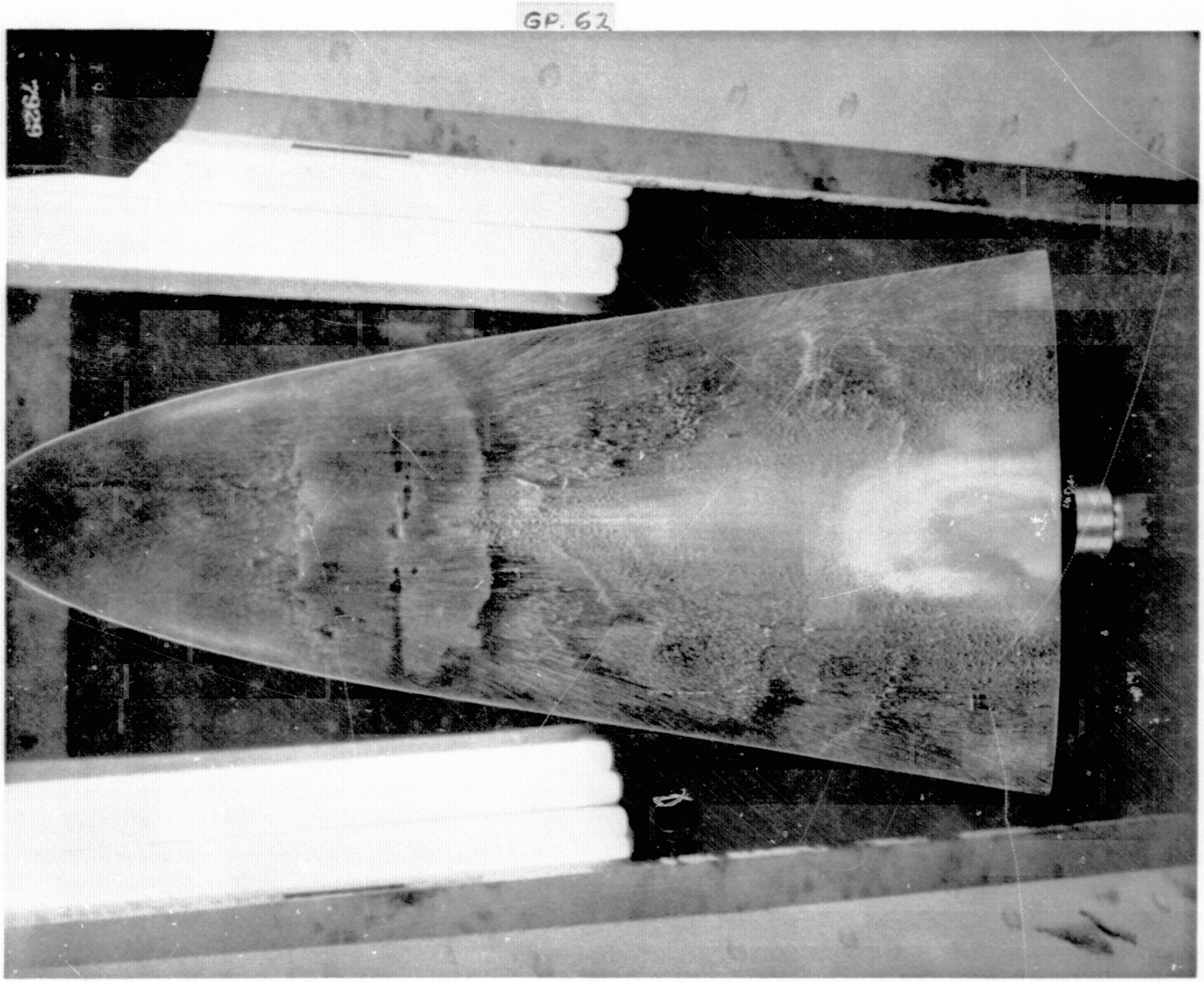
(g) Photograph of oil flow pattern on model top from Group 62.

Figure 8. - Continued.

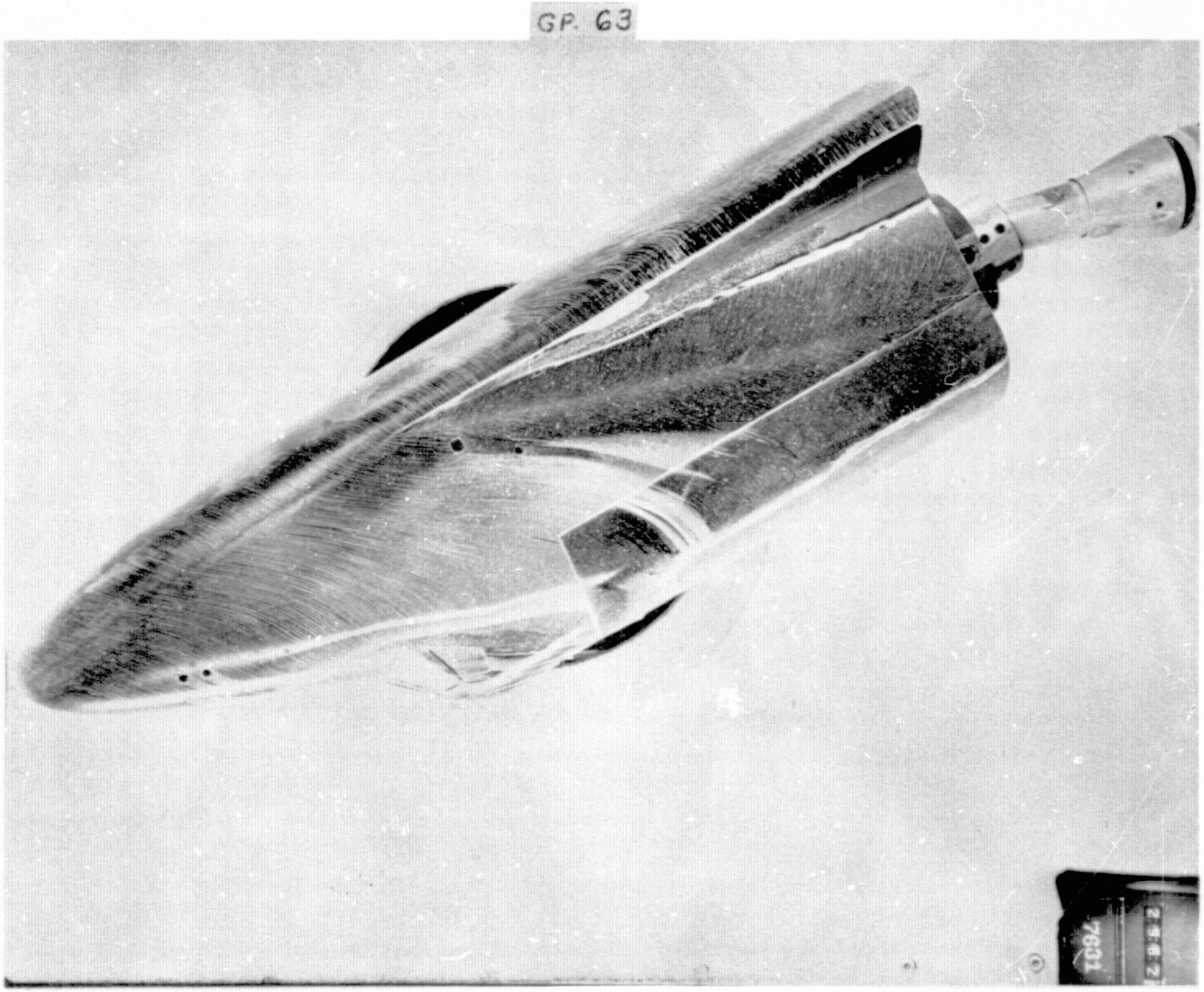


(h) Photograph of oil flow pattern on model left side from Group 62.

Figure 8. - Continued.



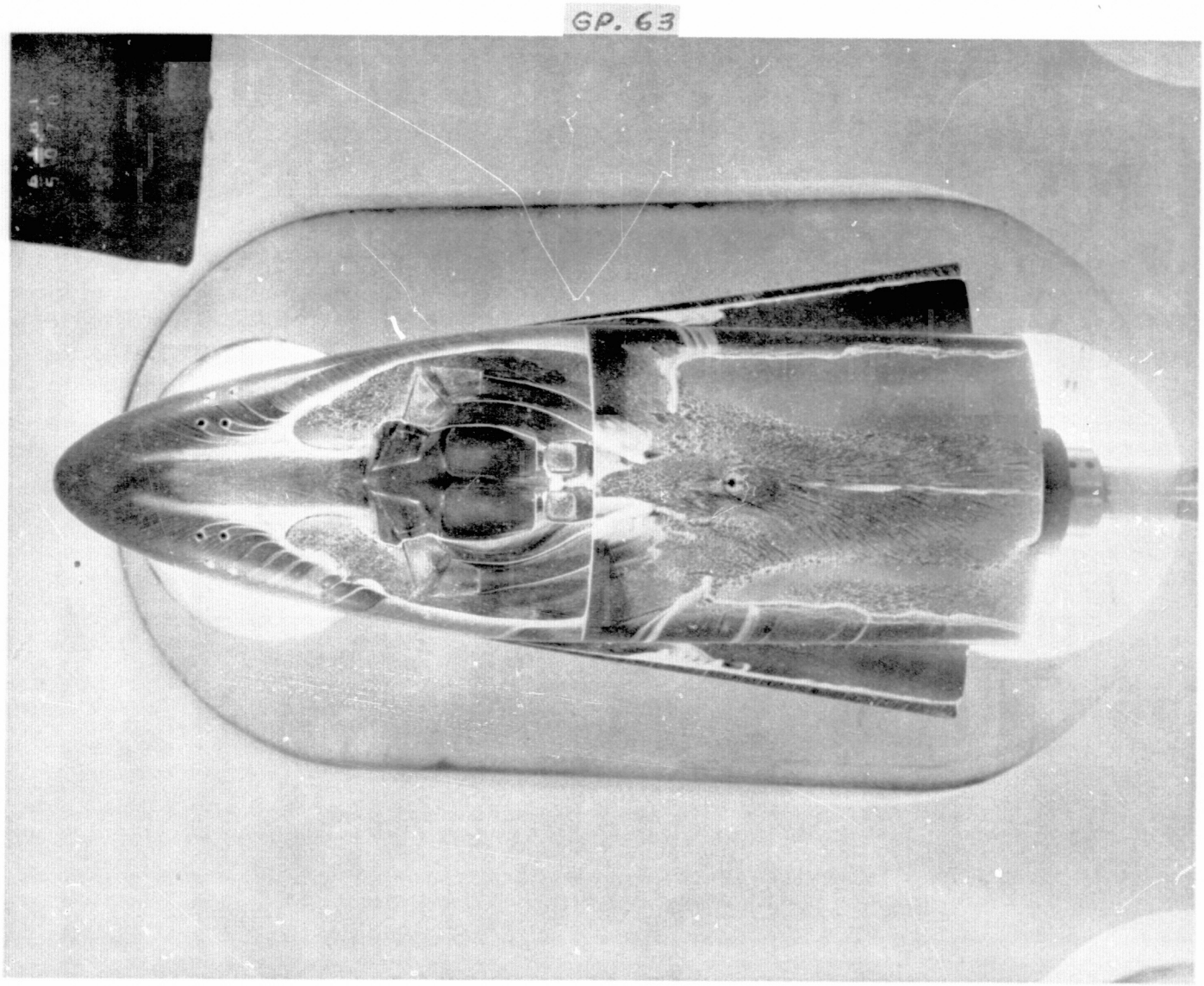
(i) Photograph of oil flow pattern on model bottom from Group 62.
Figure 8. - Continued.



(j) Photograph of oil flow pattern on model right side from Group 63.

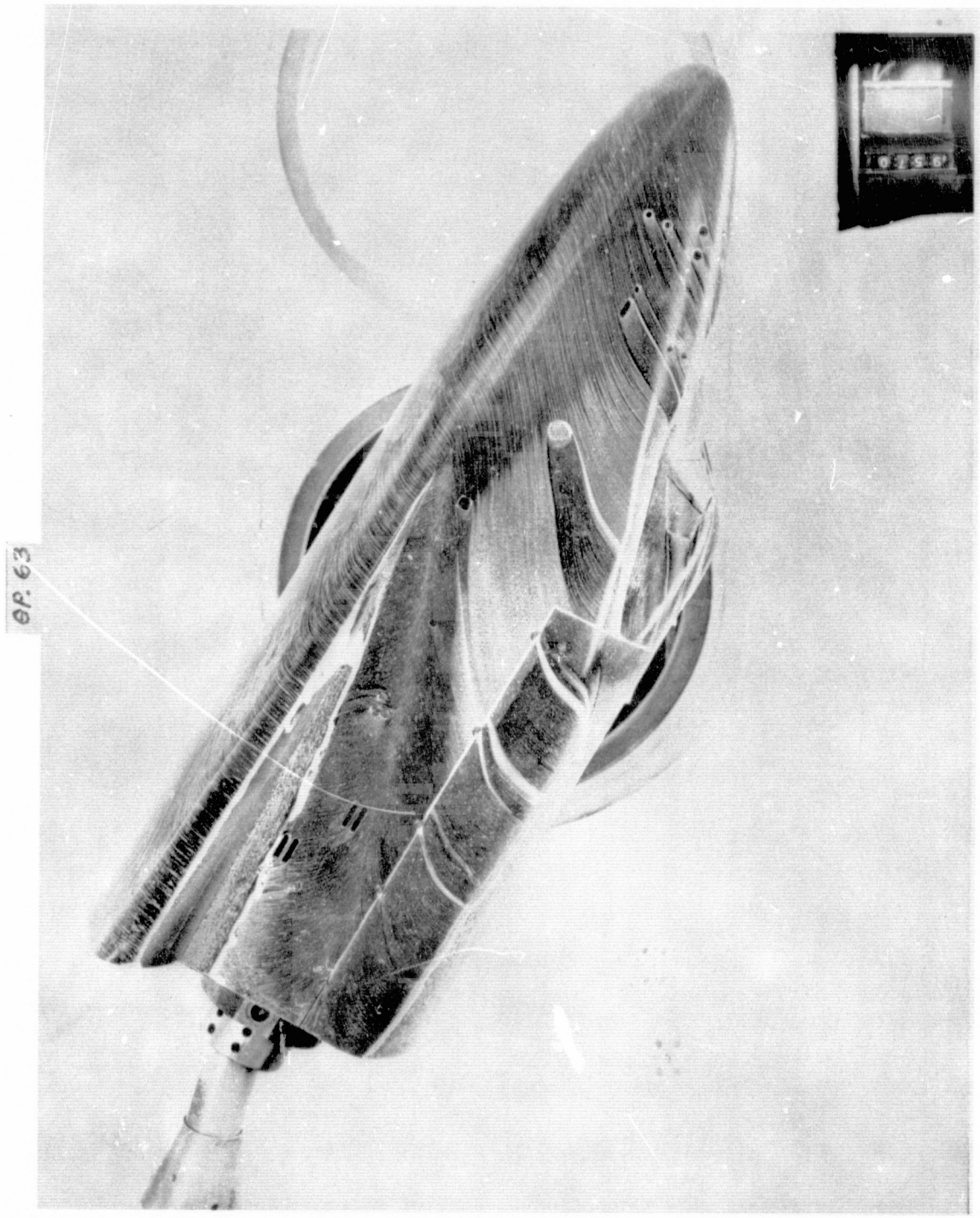
Figure 8. - Continued.

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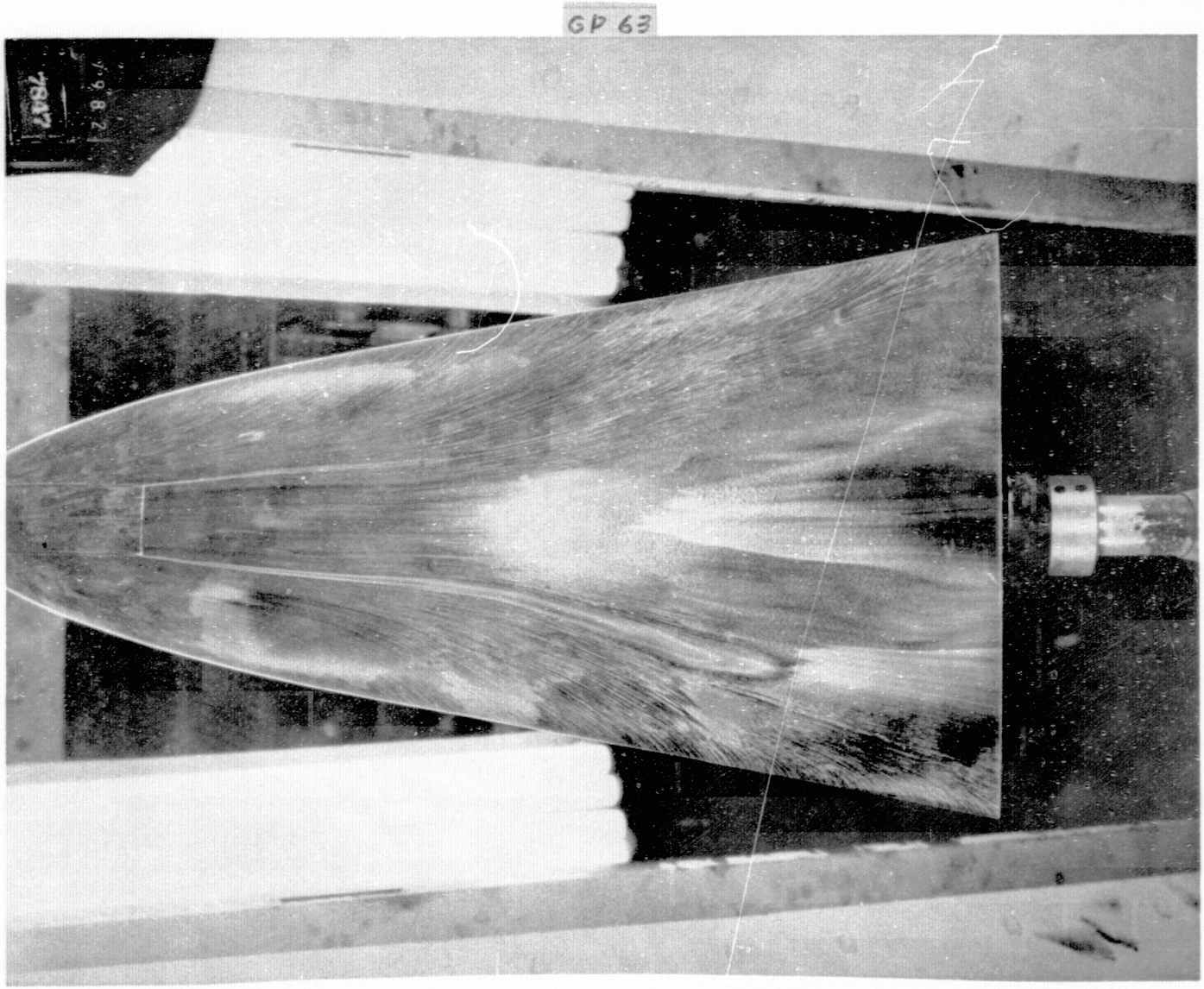
(k) Photograph of oil flow pattern on model top from Group 63.
Figure 8. - Continued.

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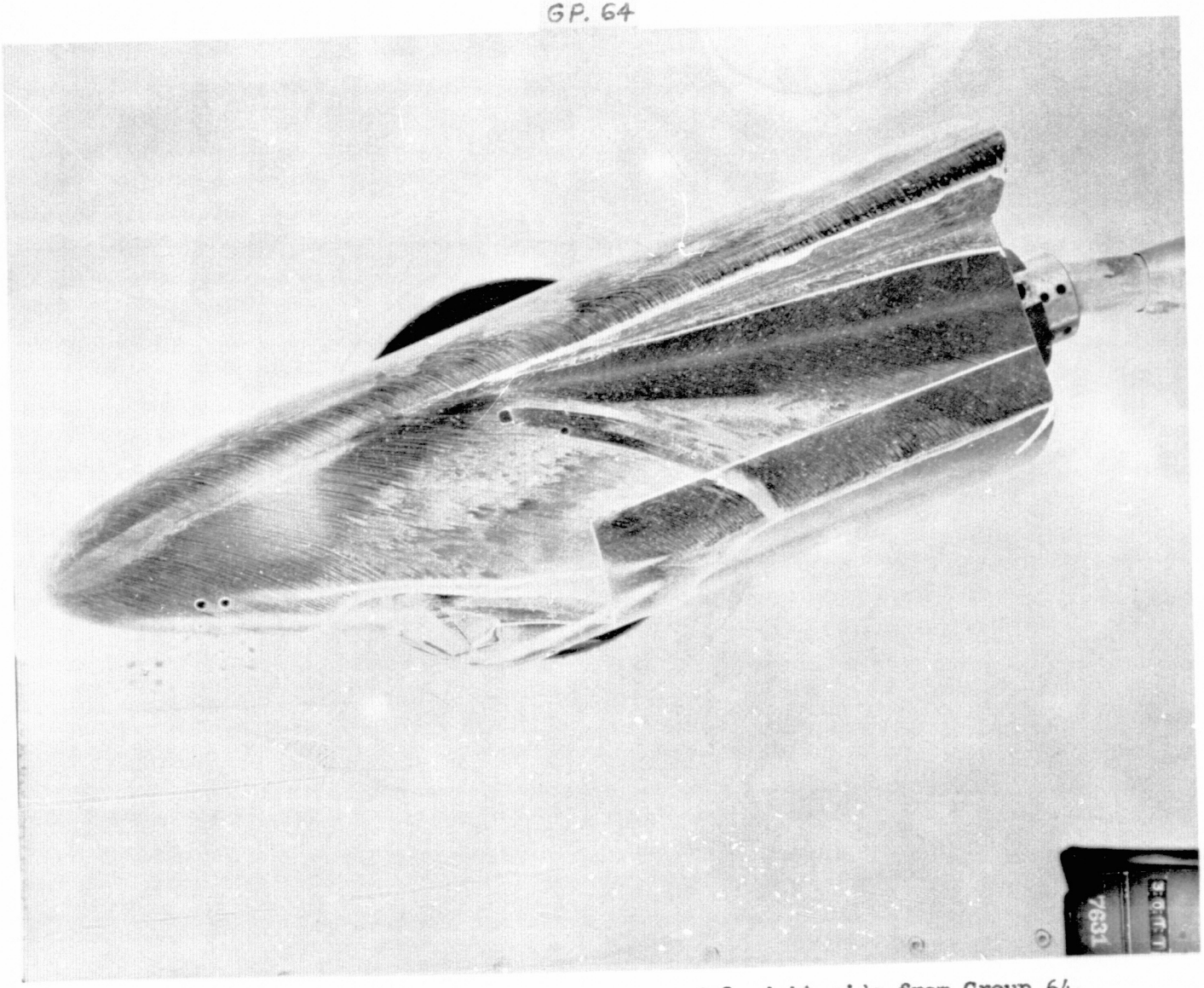


(l) Photograph of oil flow pattern on model left side from Group 63.

Figure 8. - Continued.

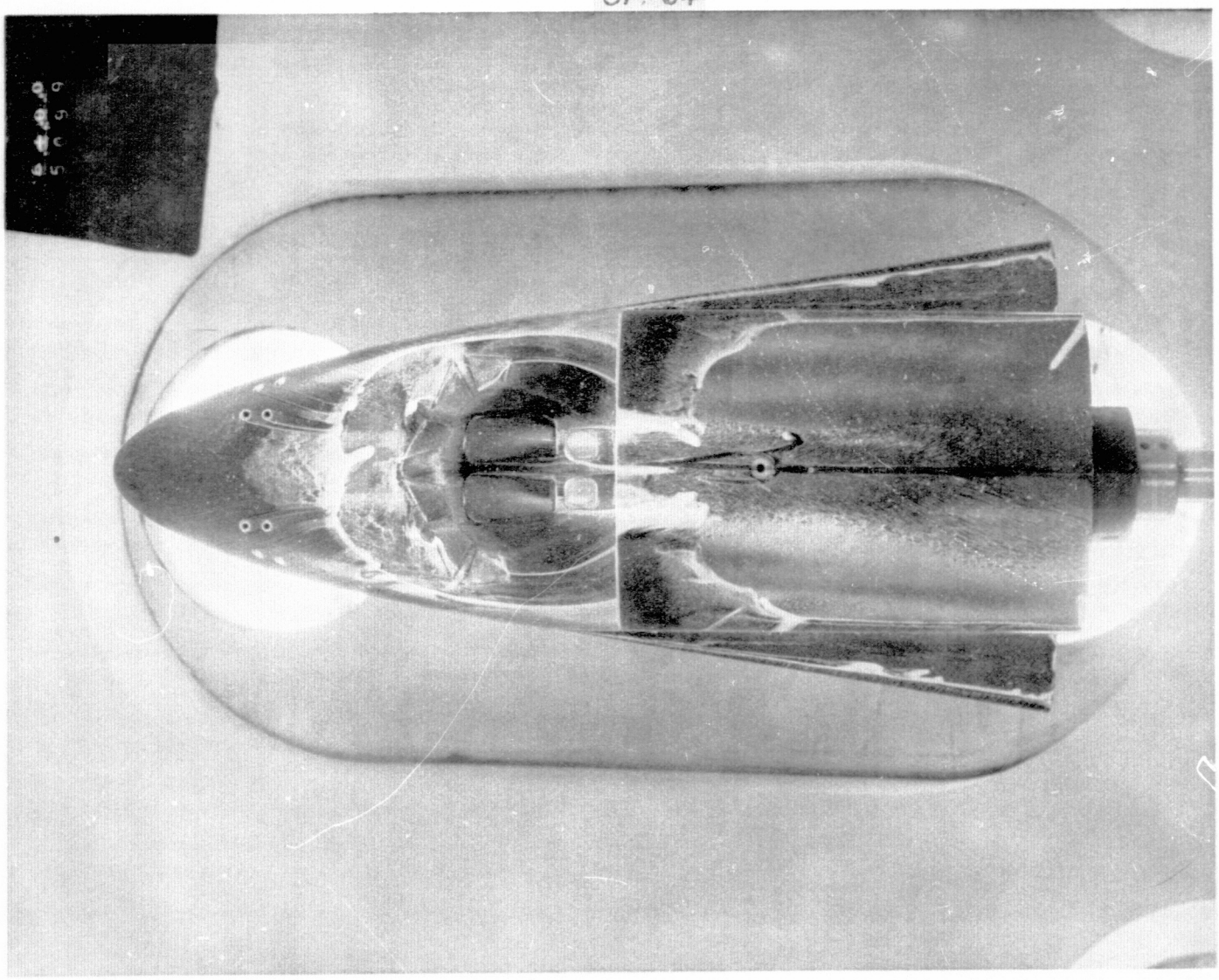


(m) Photograph of oil flow pattern on model bottom from Group 63.
Figure 8. - Continued.



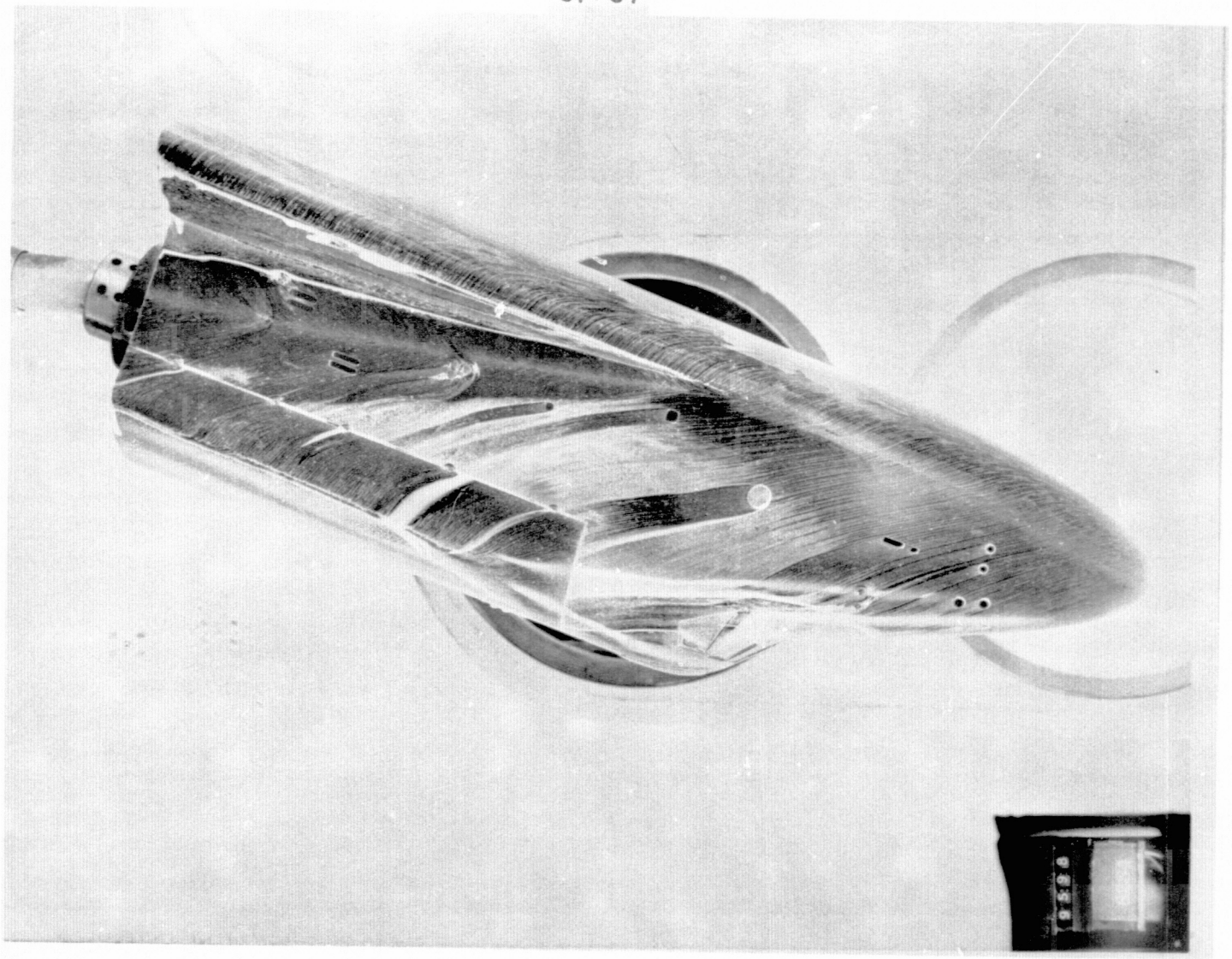
(n) Photograph of oil flow pattern on model right side from Group 64.
Figure 8. - Continued.

GP. 64



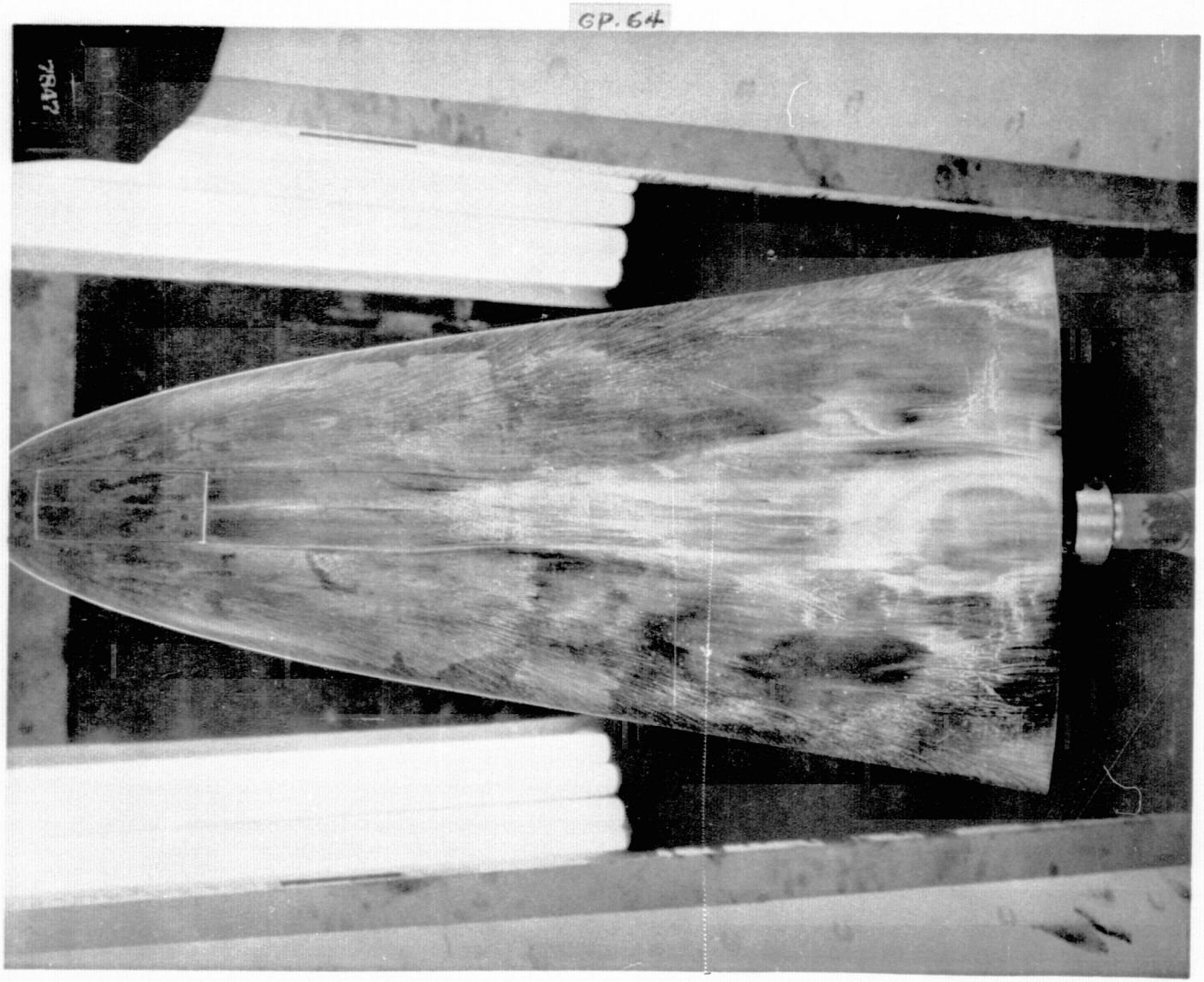
(o) Photograph of oil flow pattern on model top from Group 64.
Figure 8. - Continued.

GP 64



(p) Photograph of oil flow pattern on model left side from Group 64.
Figure 8. - Continued.

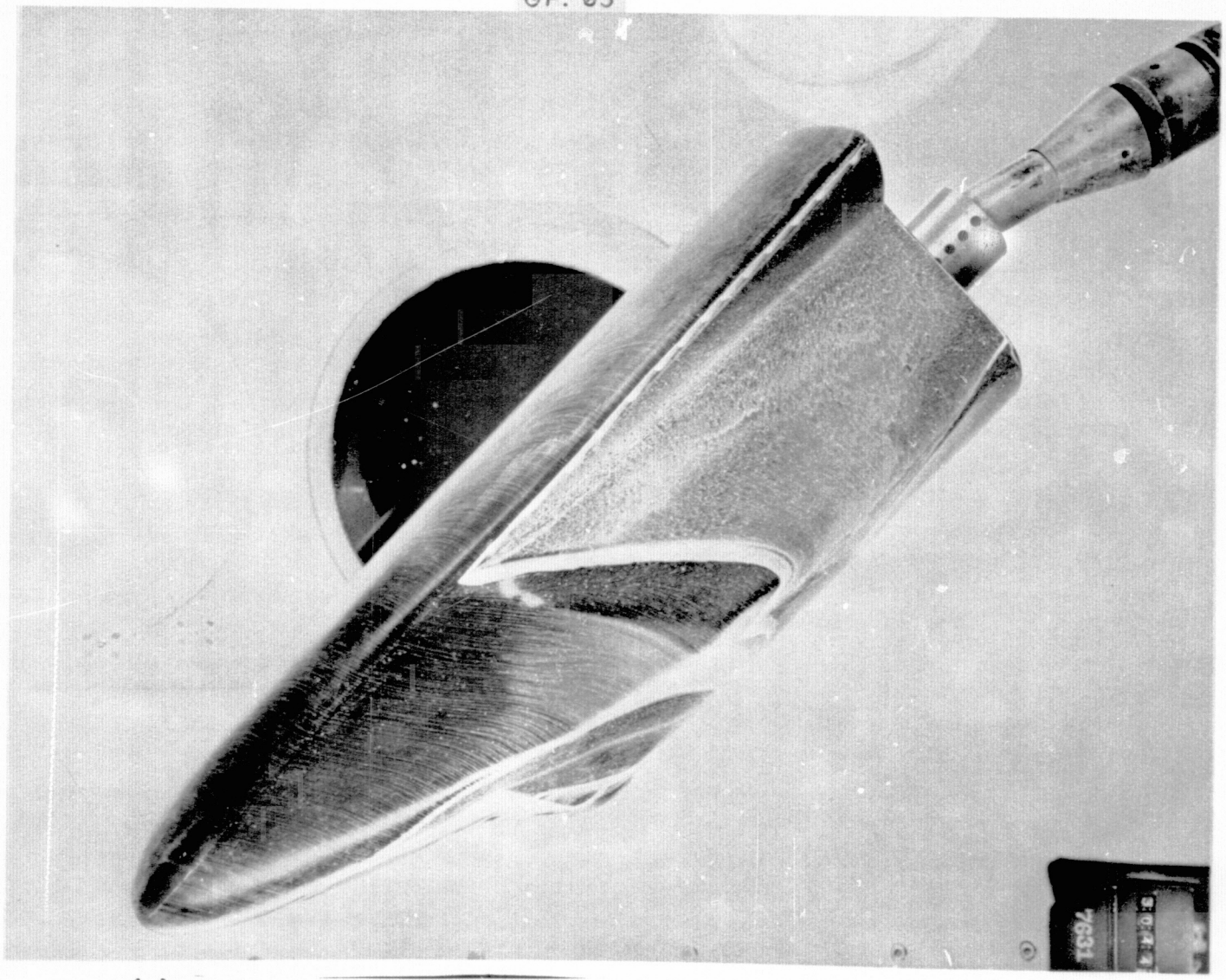
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(q) Photograph of oil flow pattern on model bottom from Group 64.

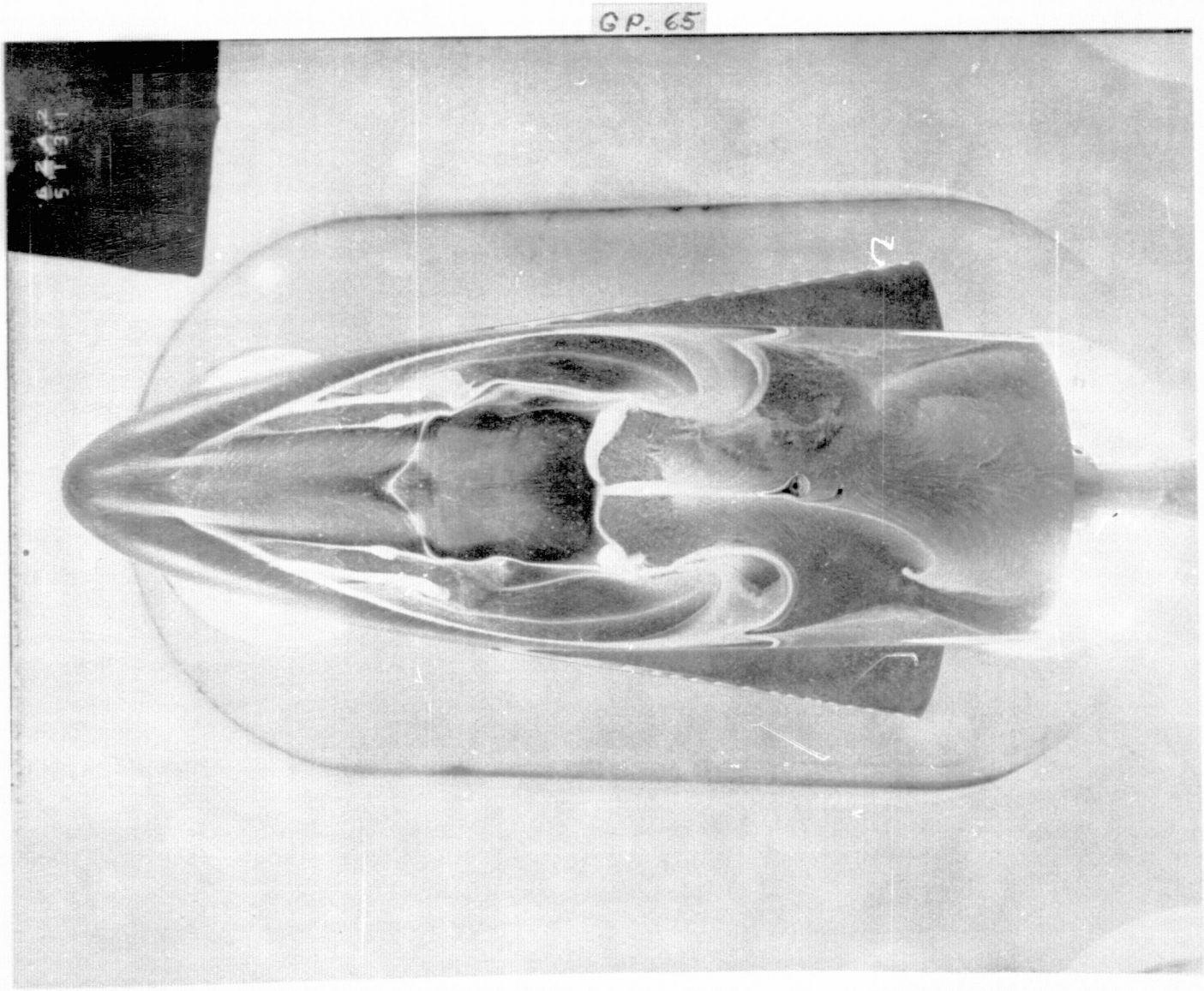
Figure 8. - Continued.

GP. 65



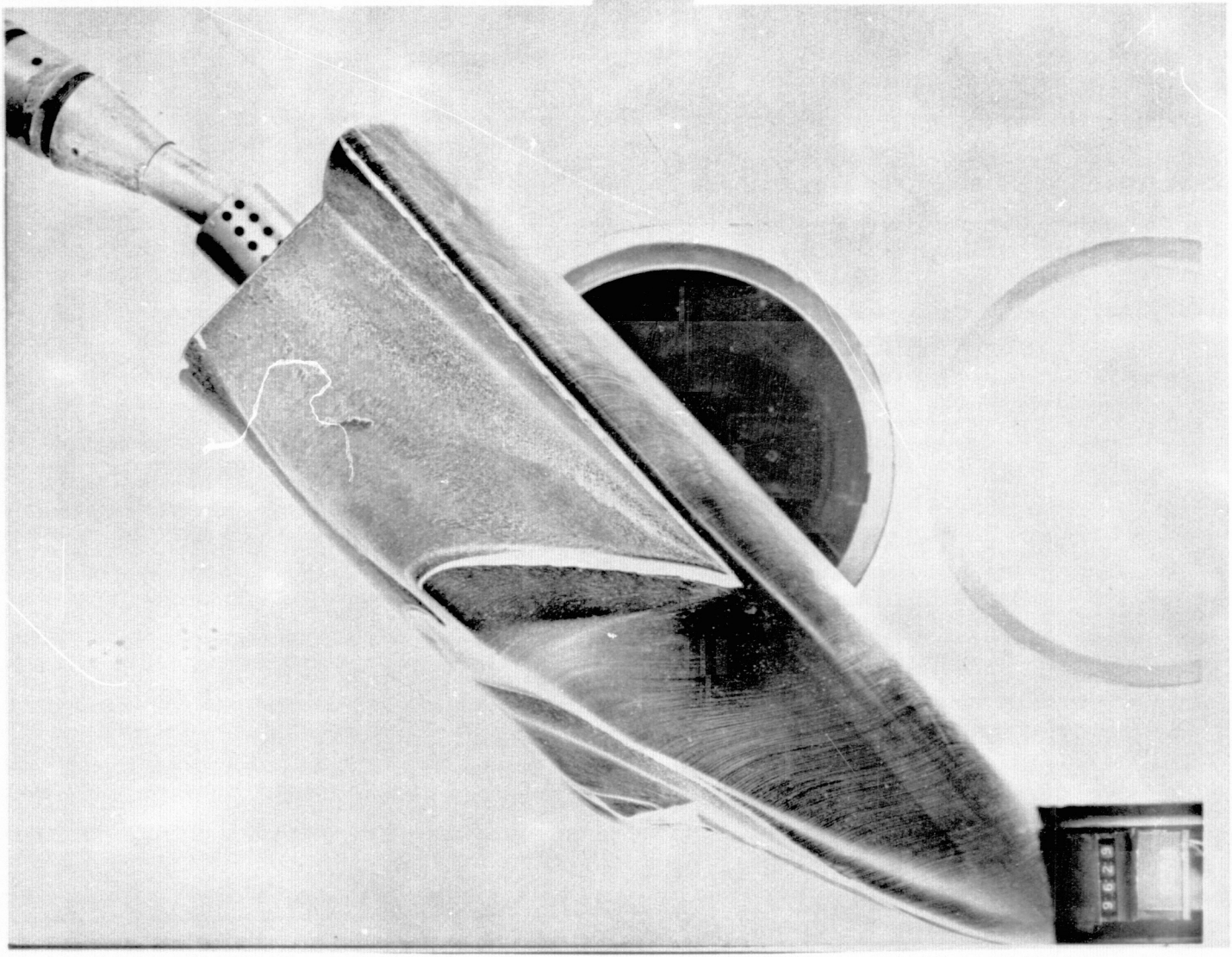
(r) Photograph of oil flow pattern on model right side from Group 65.

Figure 8. - Continued.



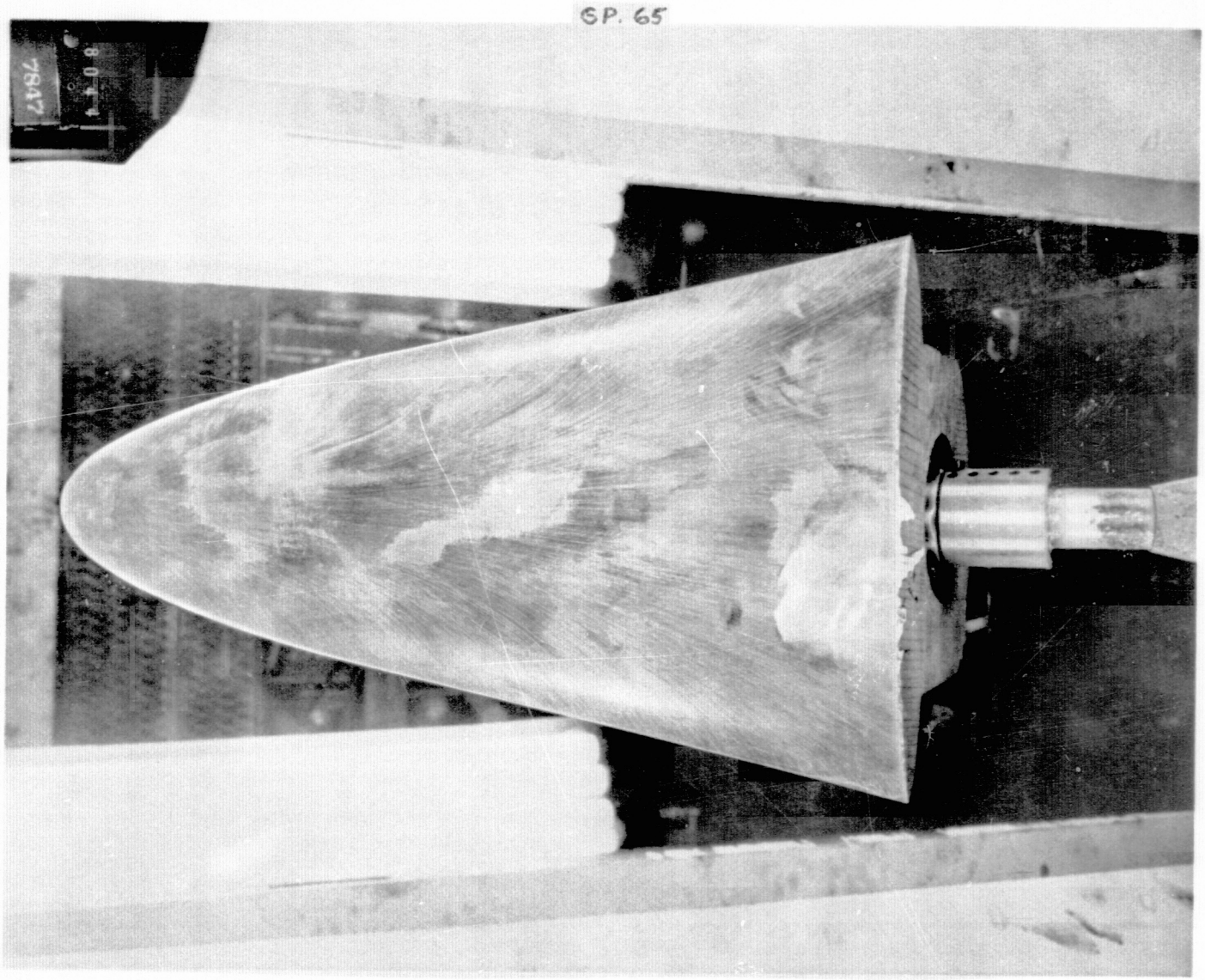
(s) Photograph of oil flow pattern on model top from Group 65.
Figure 8. - Continued.

GP. 65



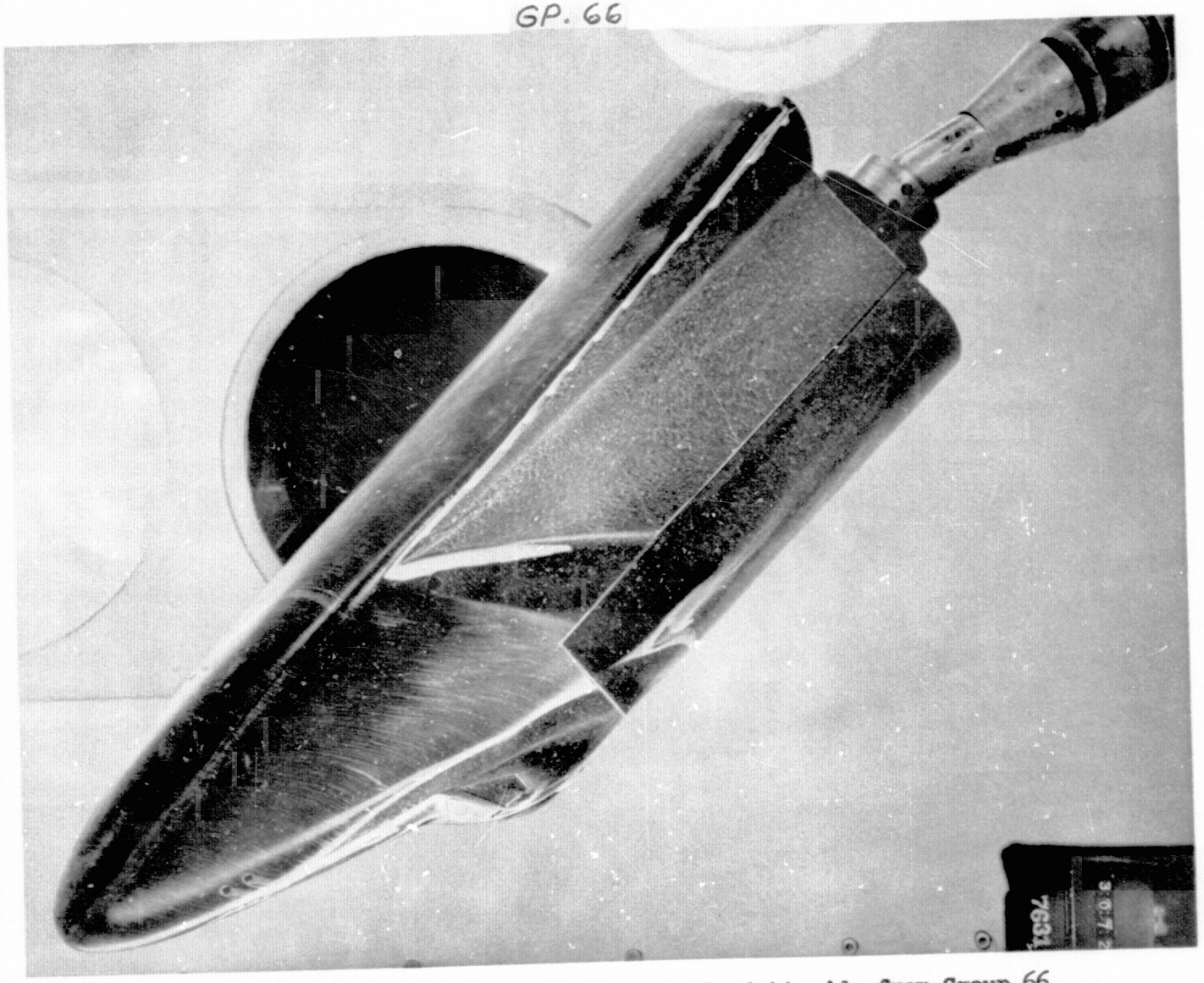
(t) Photograph of oil flow pattern on model left side from Group 65.
Figure 8. - Continued.

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



(u) Photograph of oil flow pattern on model bottom from Group 65.
Figure 8. - Continued.

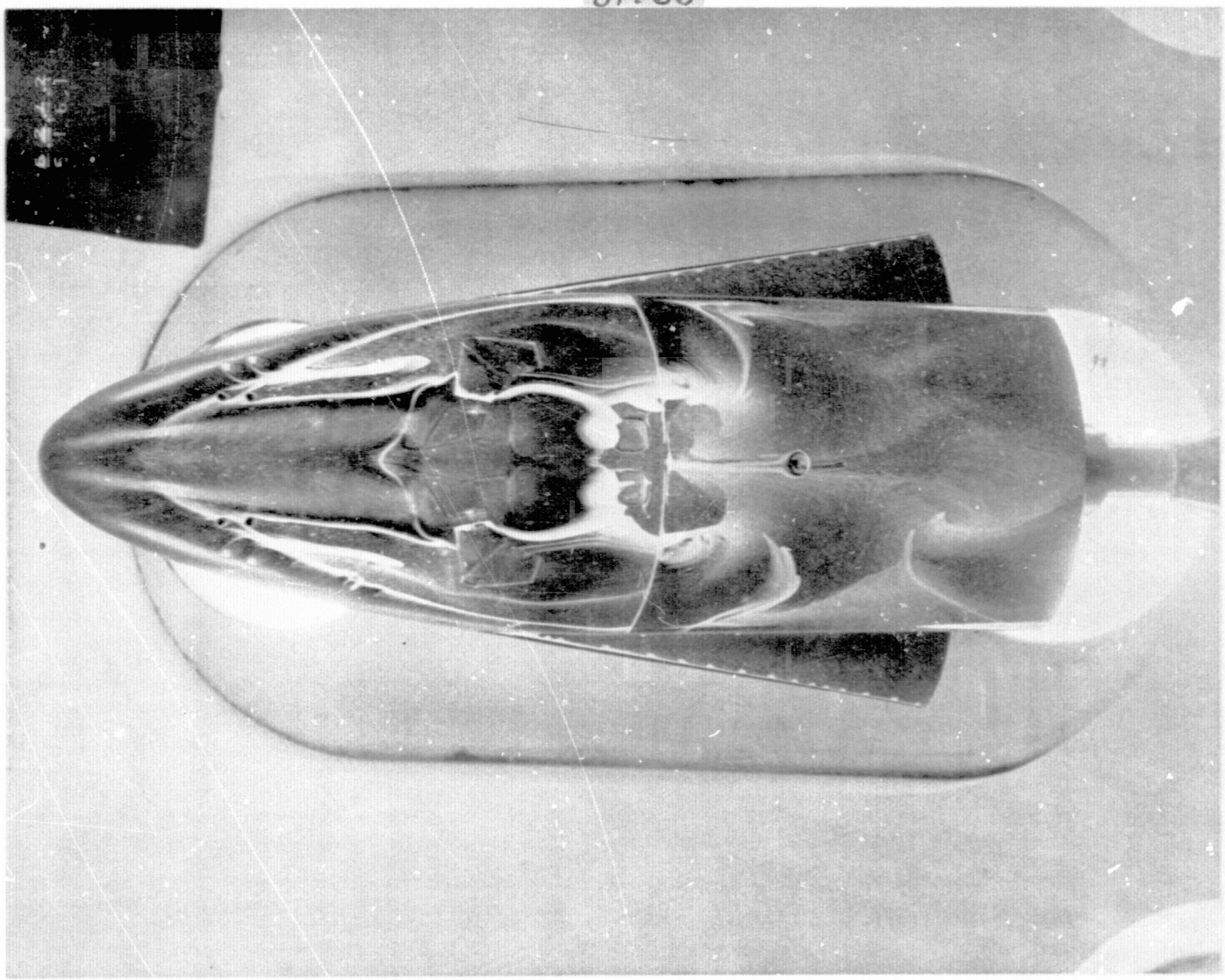
GP. 66



(v) Photograph of oil flow pattern on model right side from Group 66.
Figure 8. - Continued.

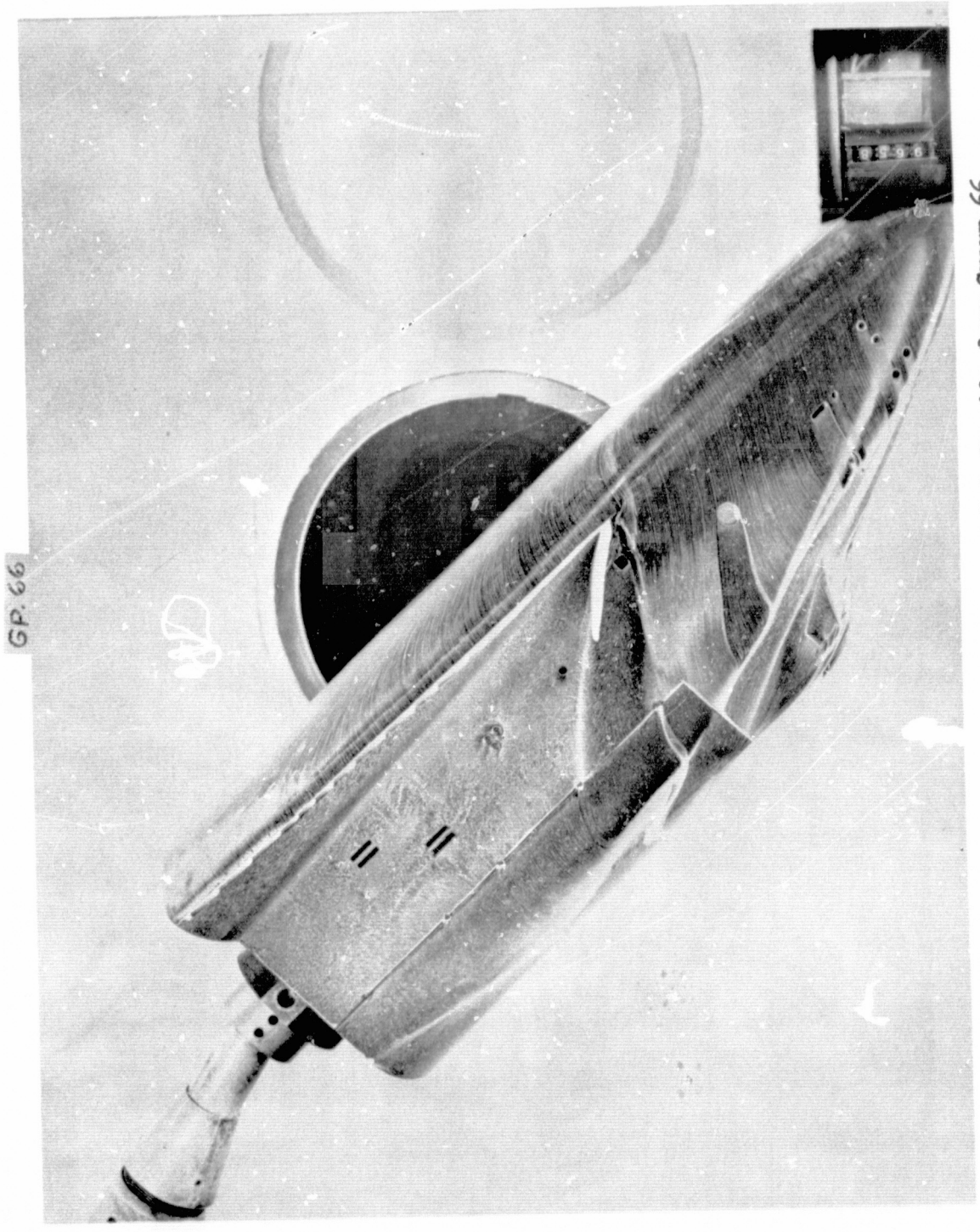
REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

GP. 66



(w) Photograph of oil flow pattern on model top from Group 66.
Figure 8. - Continued.

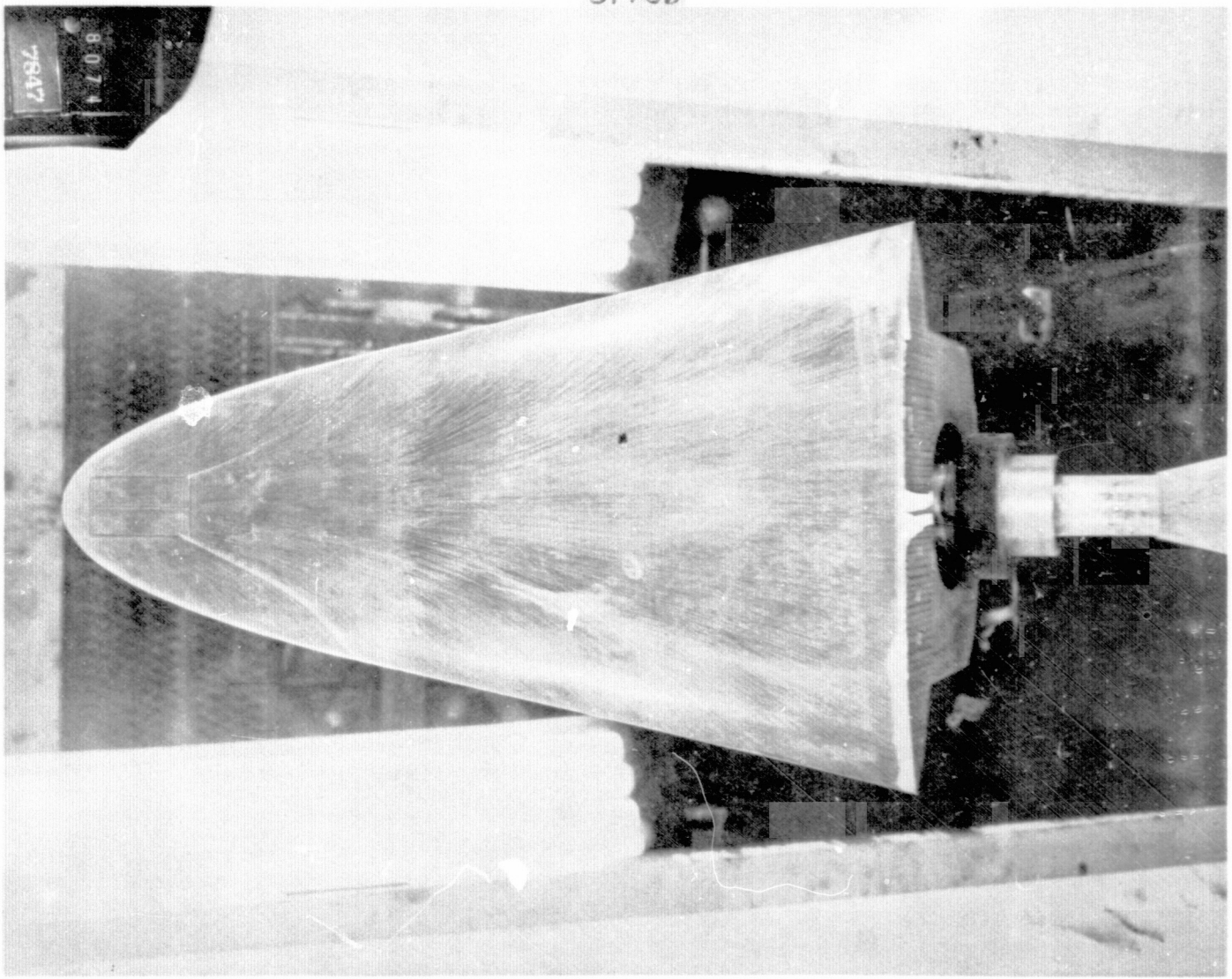
REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



(x) Photograph of oil flow pattern on model left side from Group 66.

Figure 8. - Continued.

GP. 66



(y) Photograph of oil flow pattern on model bottom from Group 66.

Figure 8. - Concluded.

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APPENDIX A

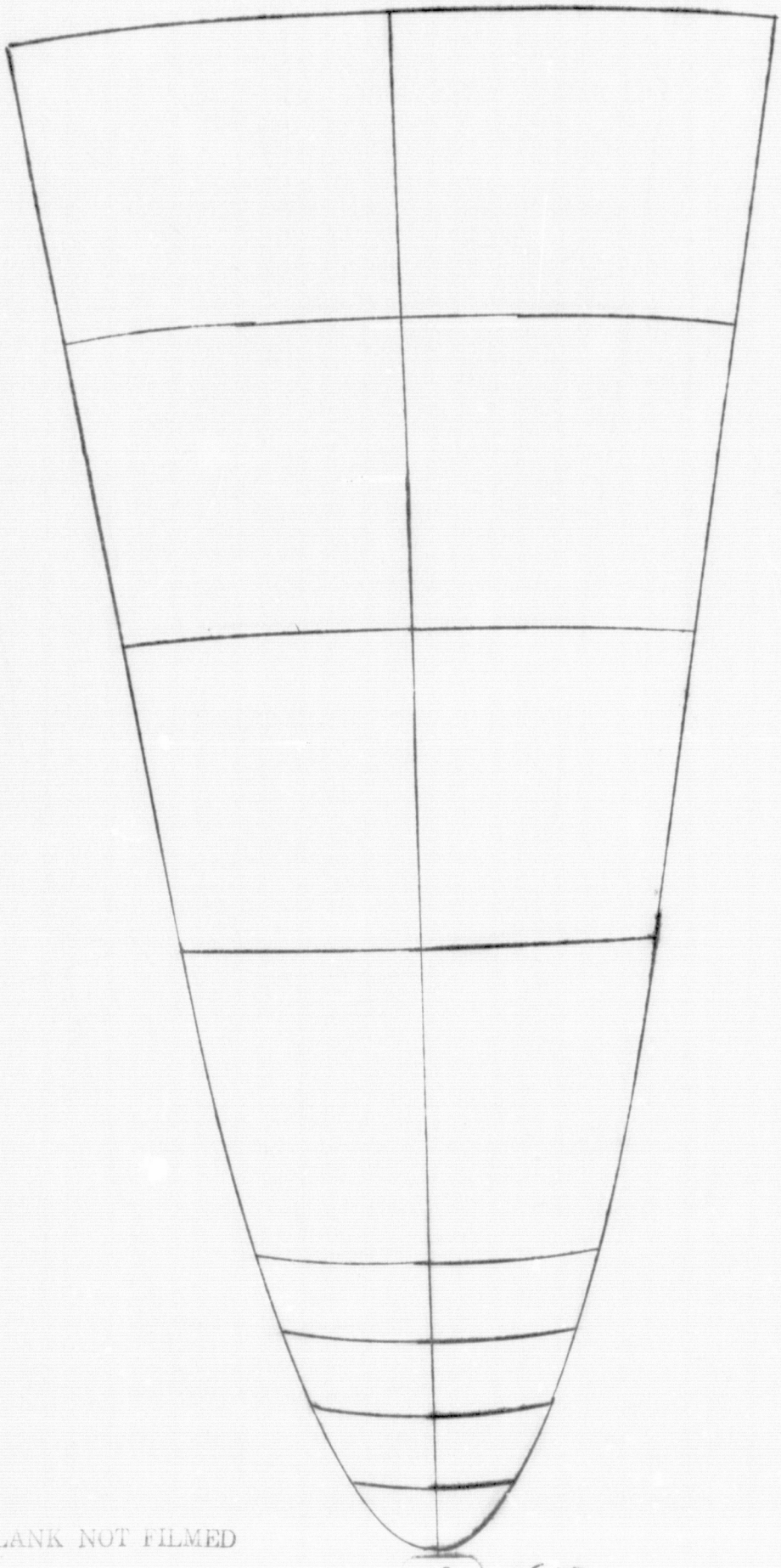
GRID TRACINGS

GRID DESCRIPTIONS	PAGES
Orbiter Bottom View	69-84
Orbiter Right View	85-109
Orbiter Top View	110-135
Orbiter Left View	136-140

Following are tracings of the reference grid photographs. Refer to figure 3 for information on the locations of these lines.

Because of camera replacement and realignment, three sets of grid shots are associated with this test. They are indicated with a circled number along the bottom of the tracing: (1) is for groups 1-27, (2) is for groups 28-39, and (3) is for groups 40-60.

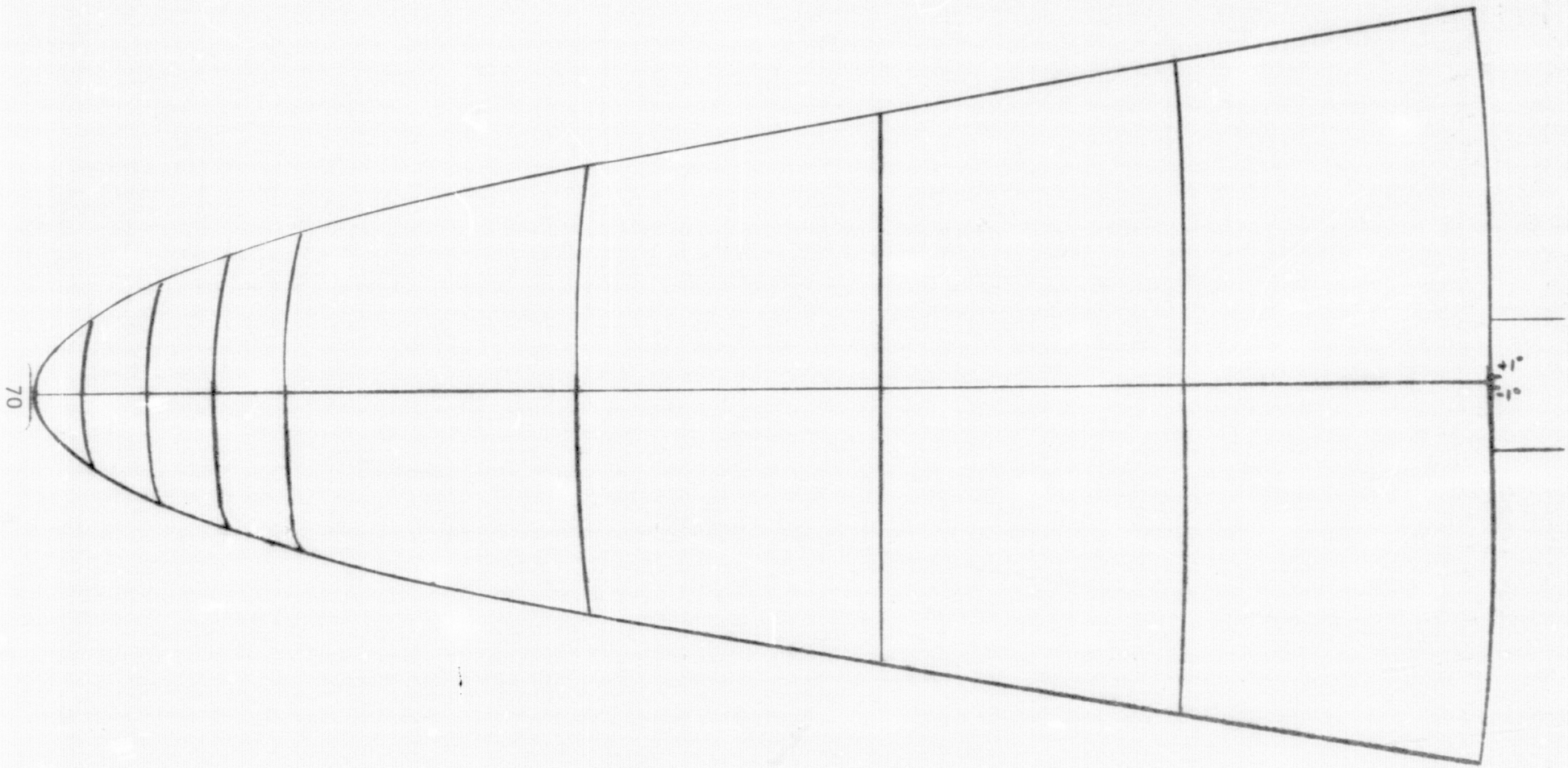
(Reverse of this page is blank.)



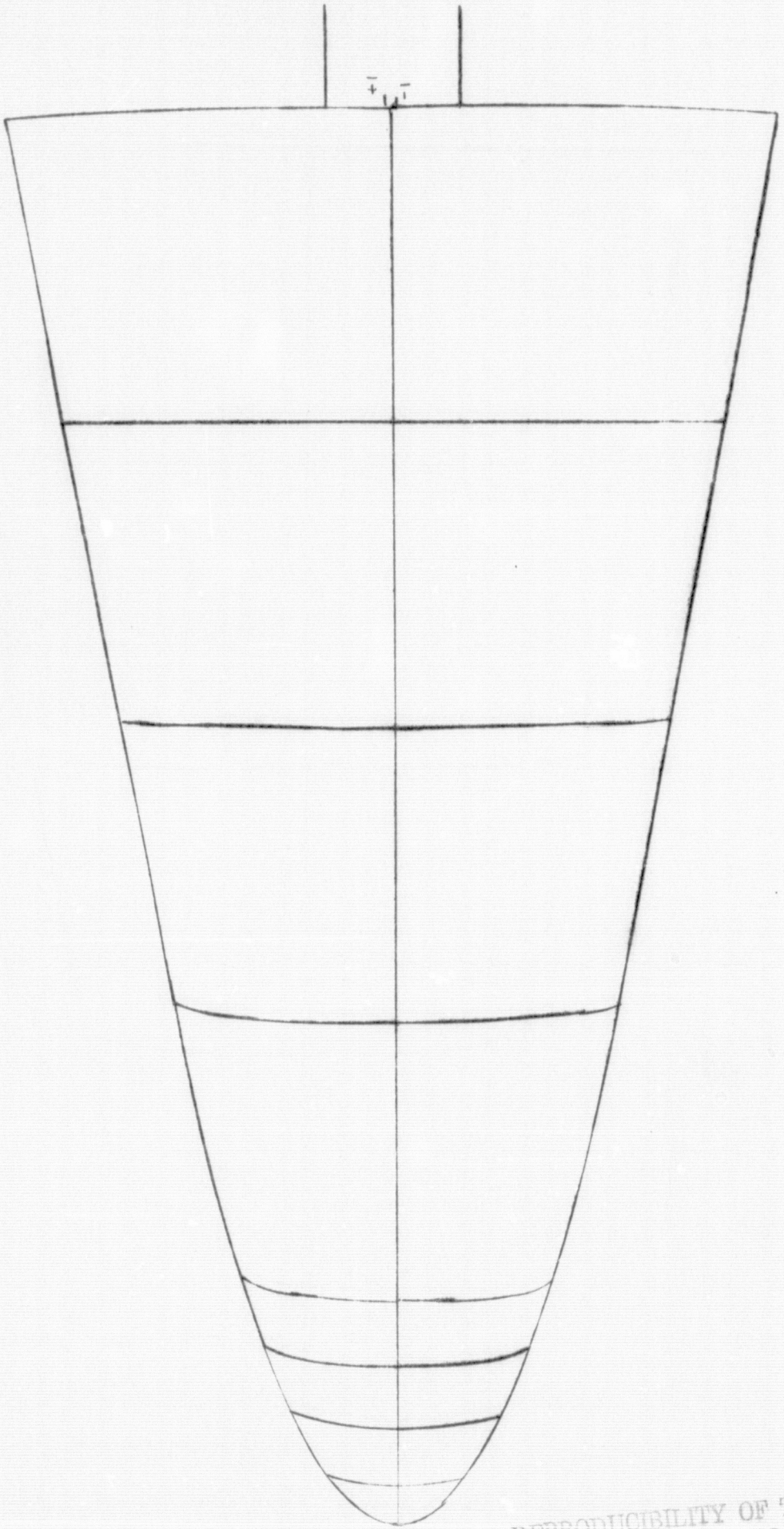
7764
$\alpha = 20°$
$\beta = 0°$

(1)

PRECEDING PAGE BLANK NOT FILMED

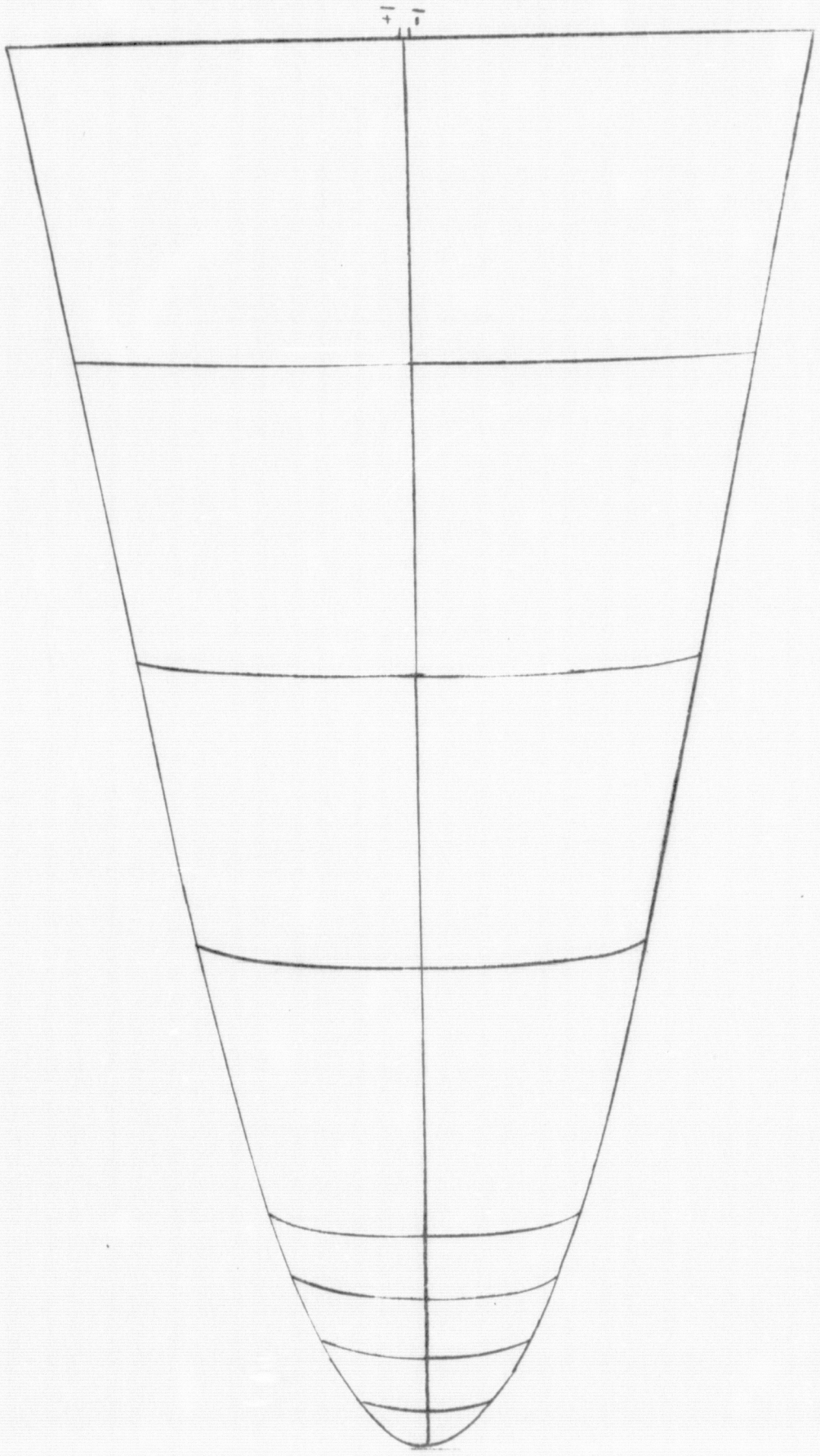


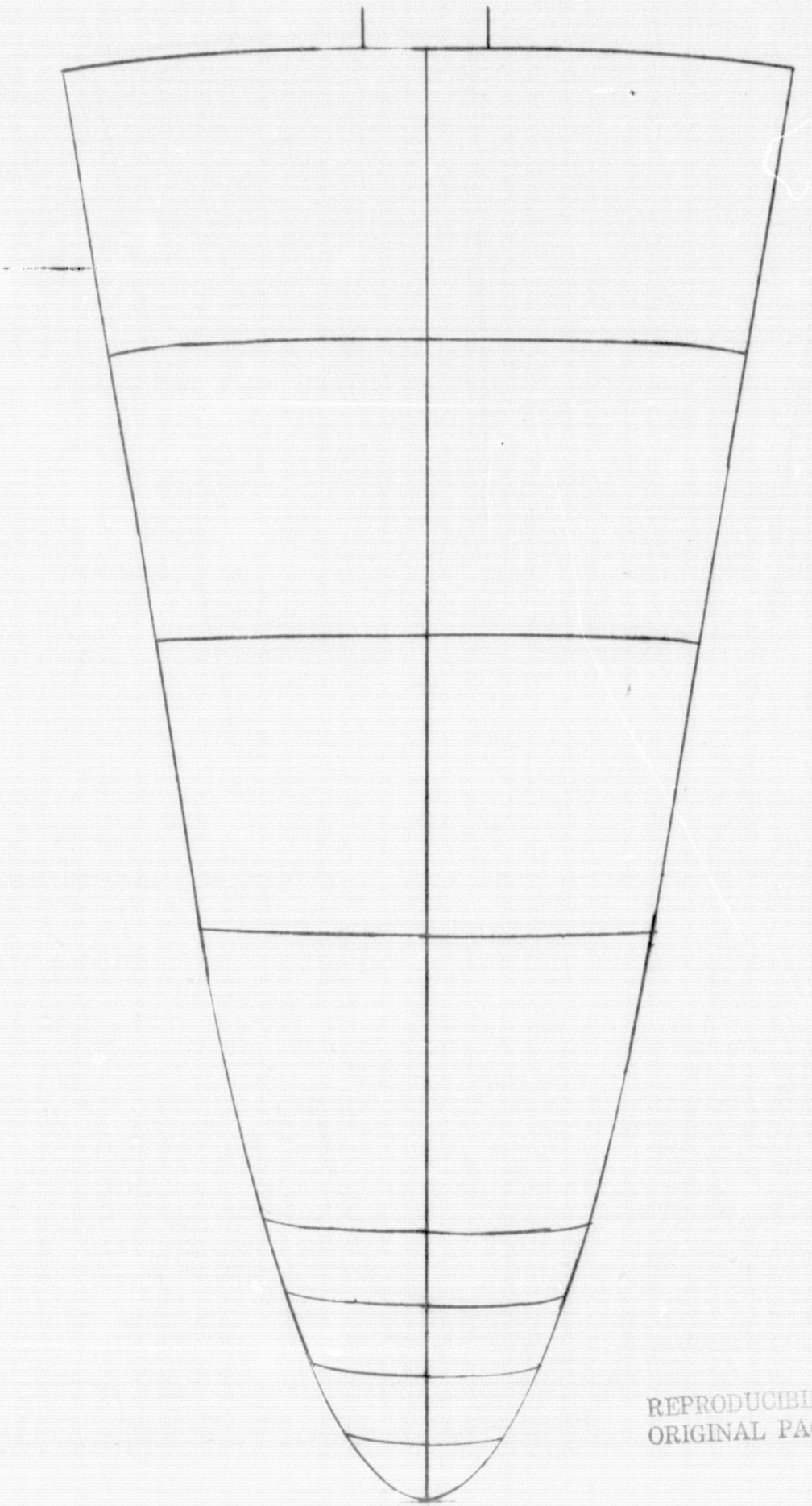
① 7764
$\alpha = 25°$
0°, +1°, -1°



7794
(1)
$\chi = 30°$
$\beta = 0°$

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

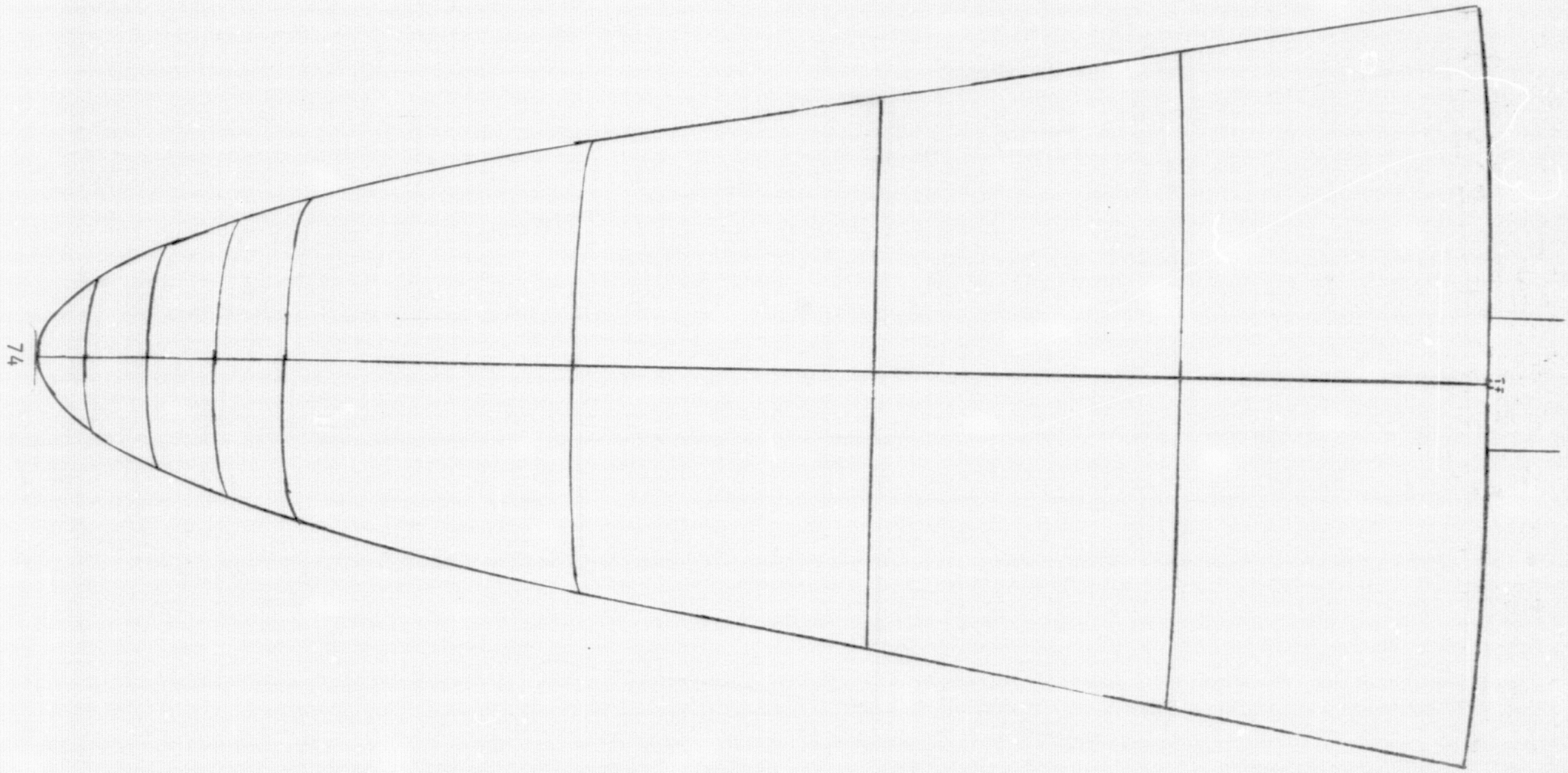

+1
-1



7408
FRAME 6576
$\alpha = 20°$
$\psi = 0°$

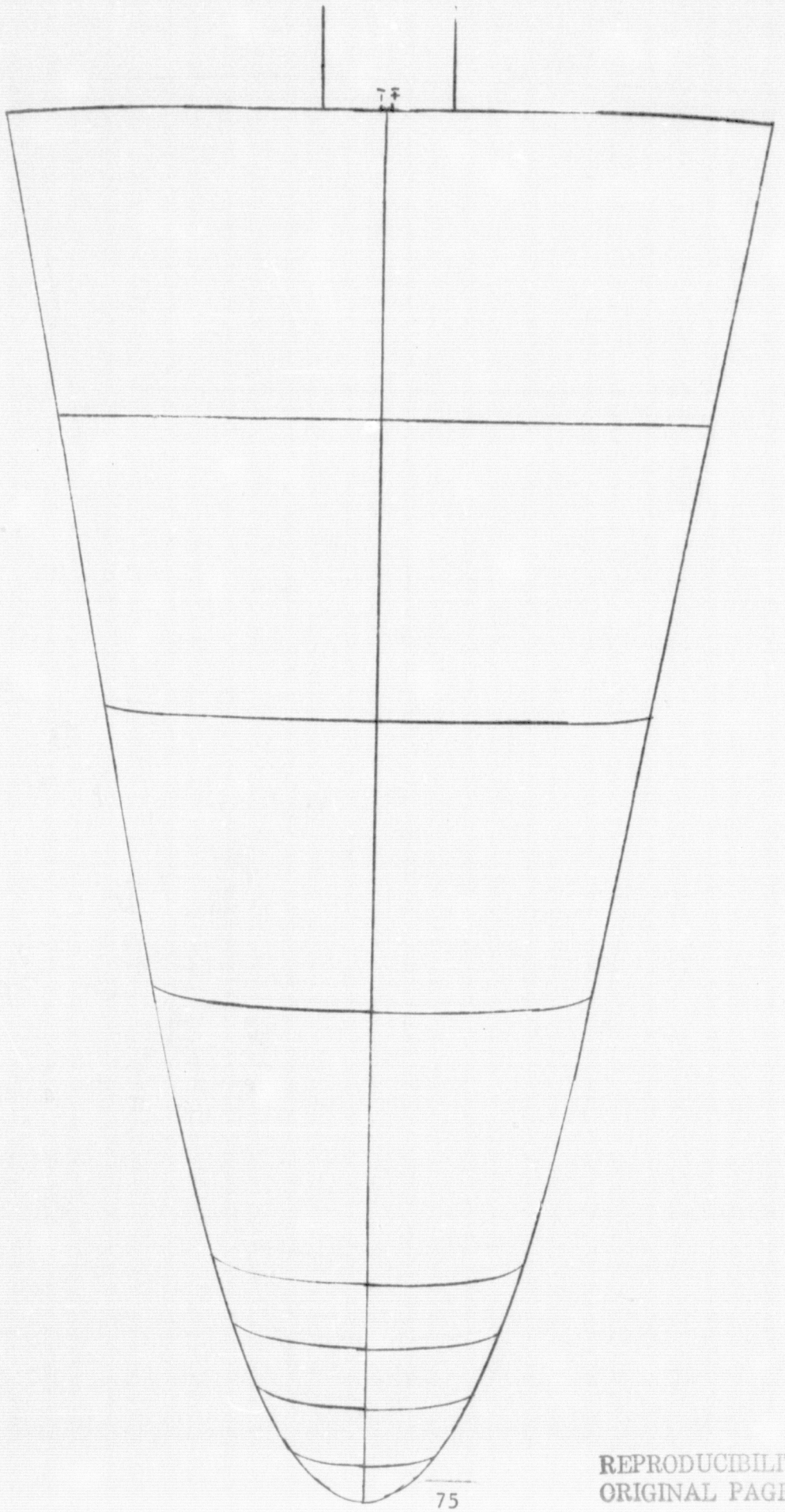
(2)

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



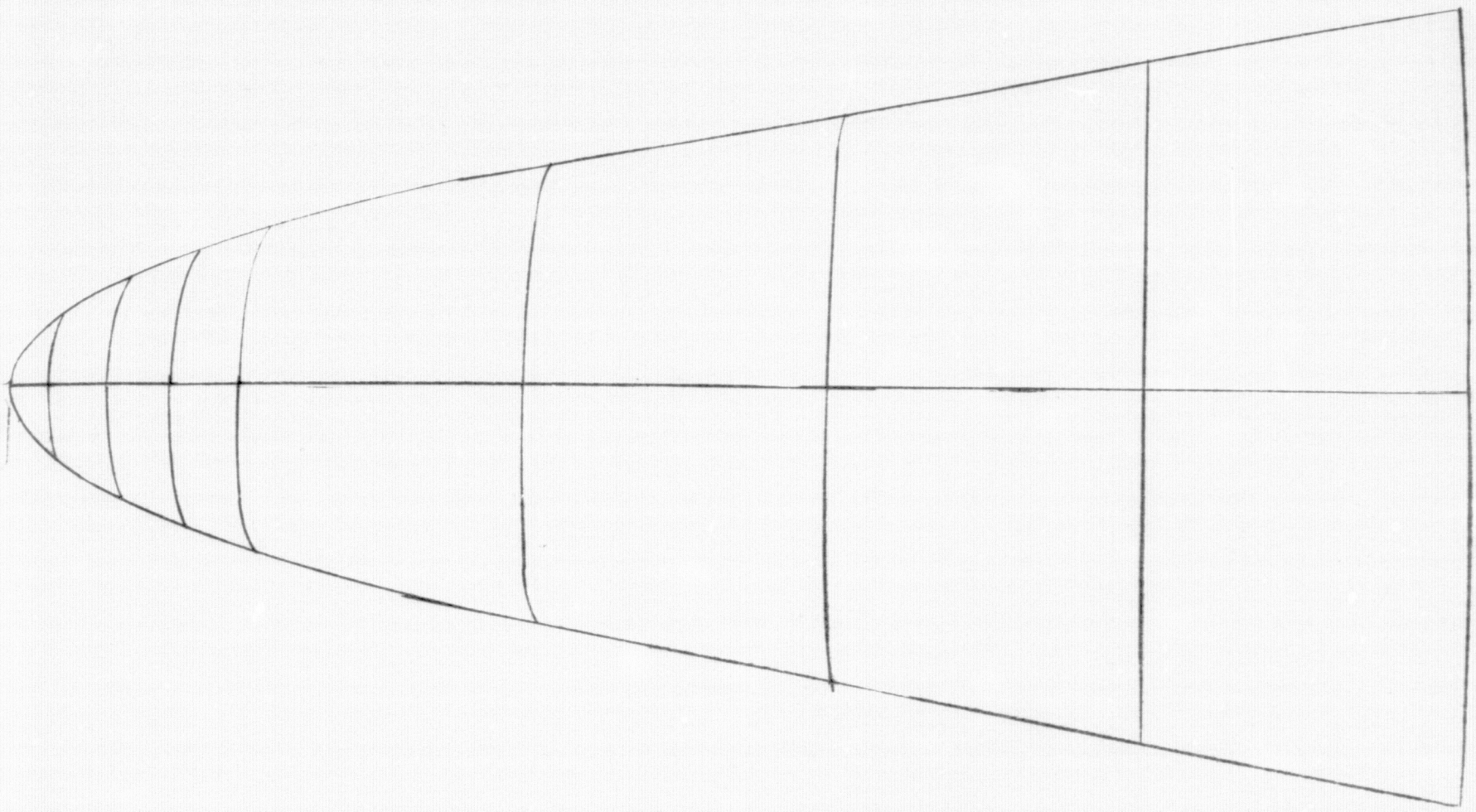
(2)

7408
FRAME 6573, 6581, 6584
$\alpha = 25$
$\phi = 0, -1, +1$



REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

2



76

(2)

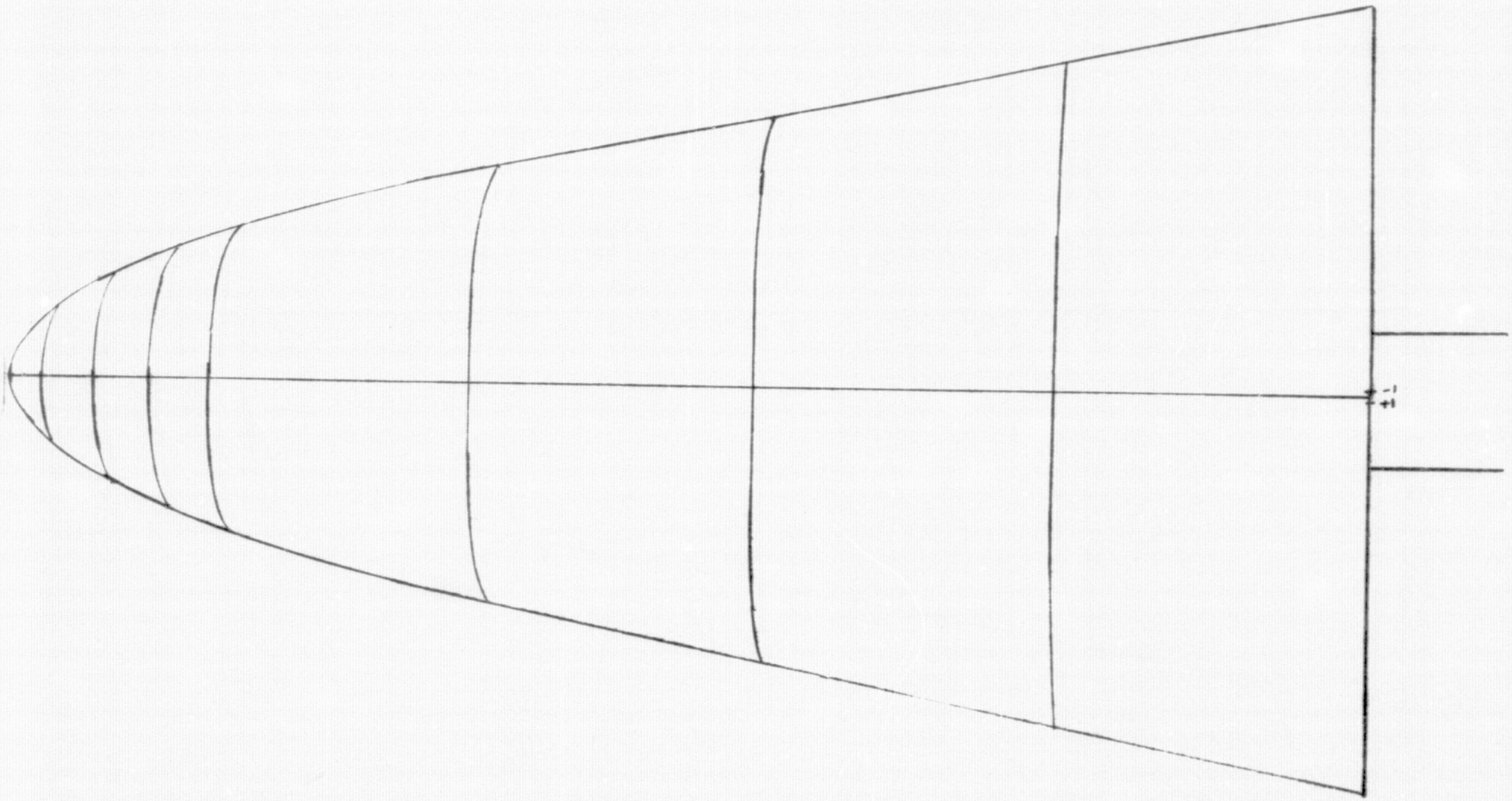
7408

Frame 6593 , 6596

$\alpha = 30°$

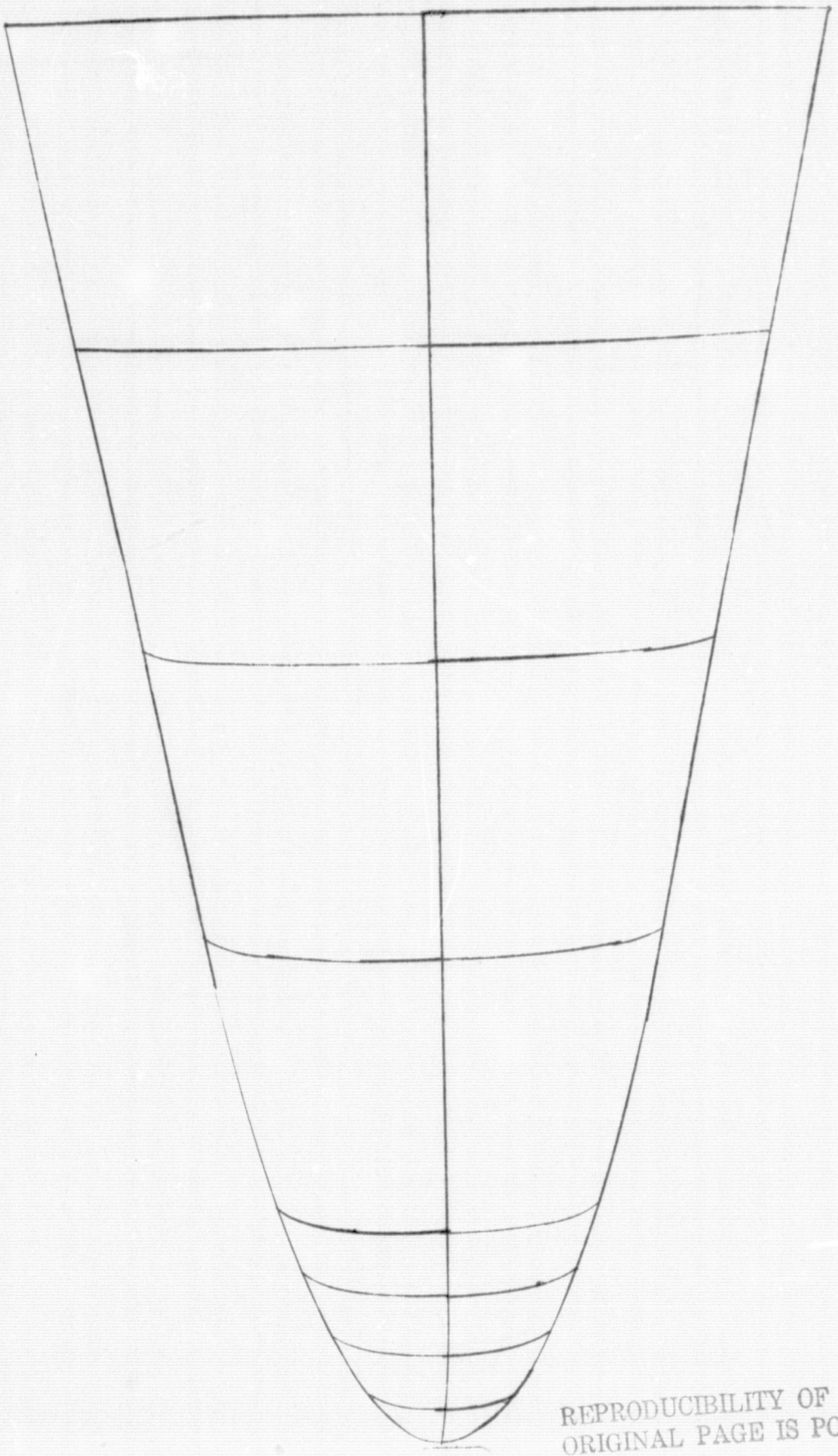
$\psi = -2$, +2 (REVERSED)

014-50A



(2)

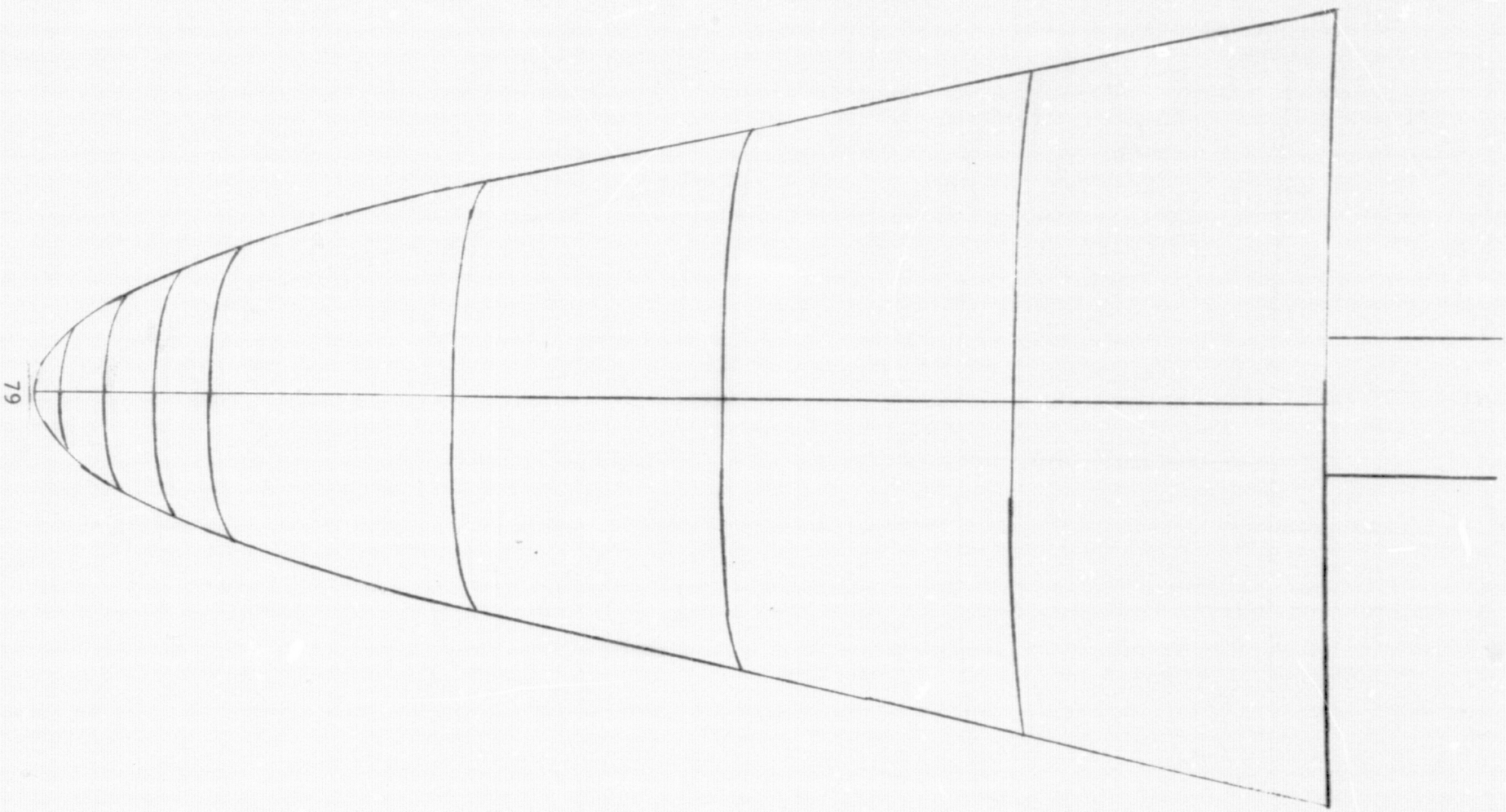
7408
Frame 6568, 6599, 6607
$\alpha = 38$
$\phi = 0, -1, +1$



REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

N

H-50A



(2)

Roll 7408
frame 6563
d= 40

OH-5DA

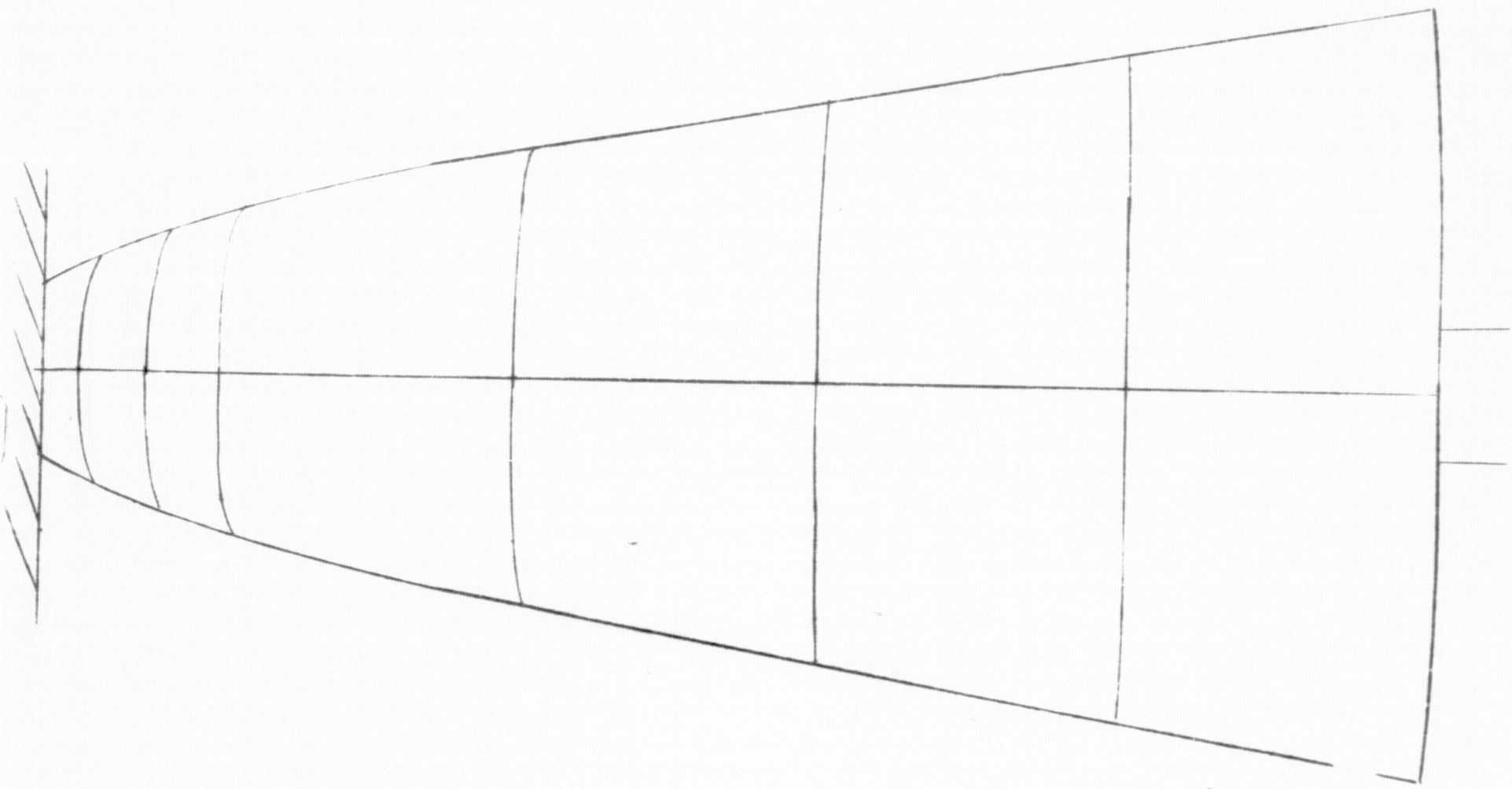
2

(2) 7408
$\alpha = 45°$
$\psi =$

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

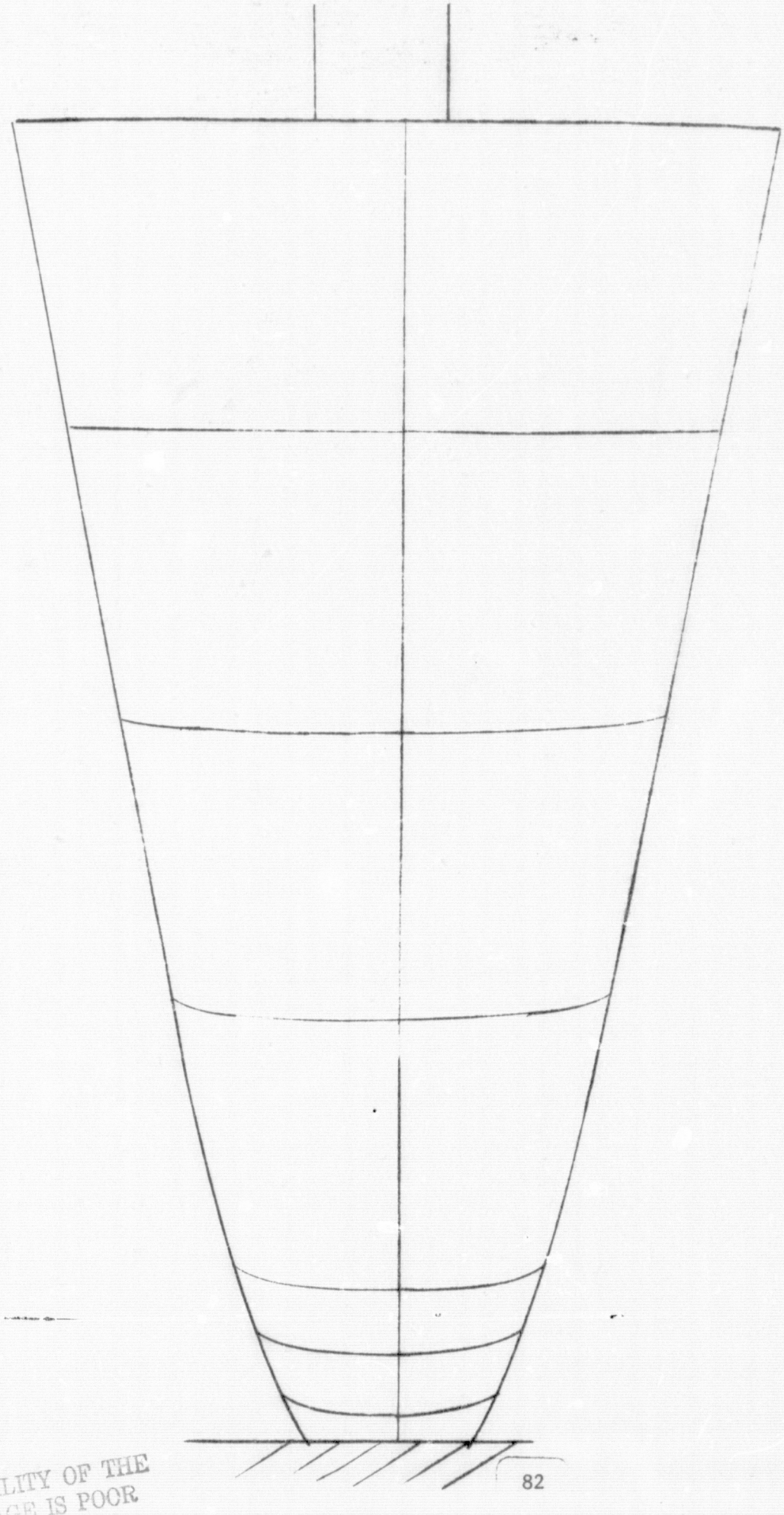
3

OH-50A



81

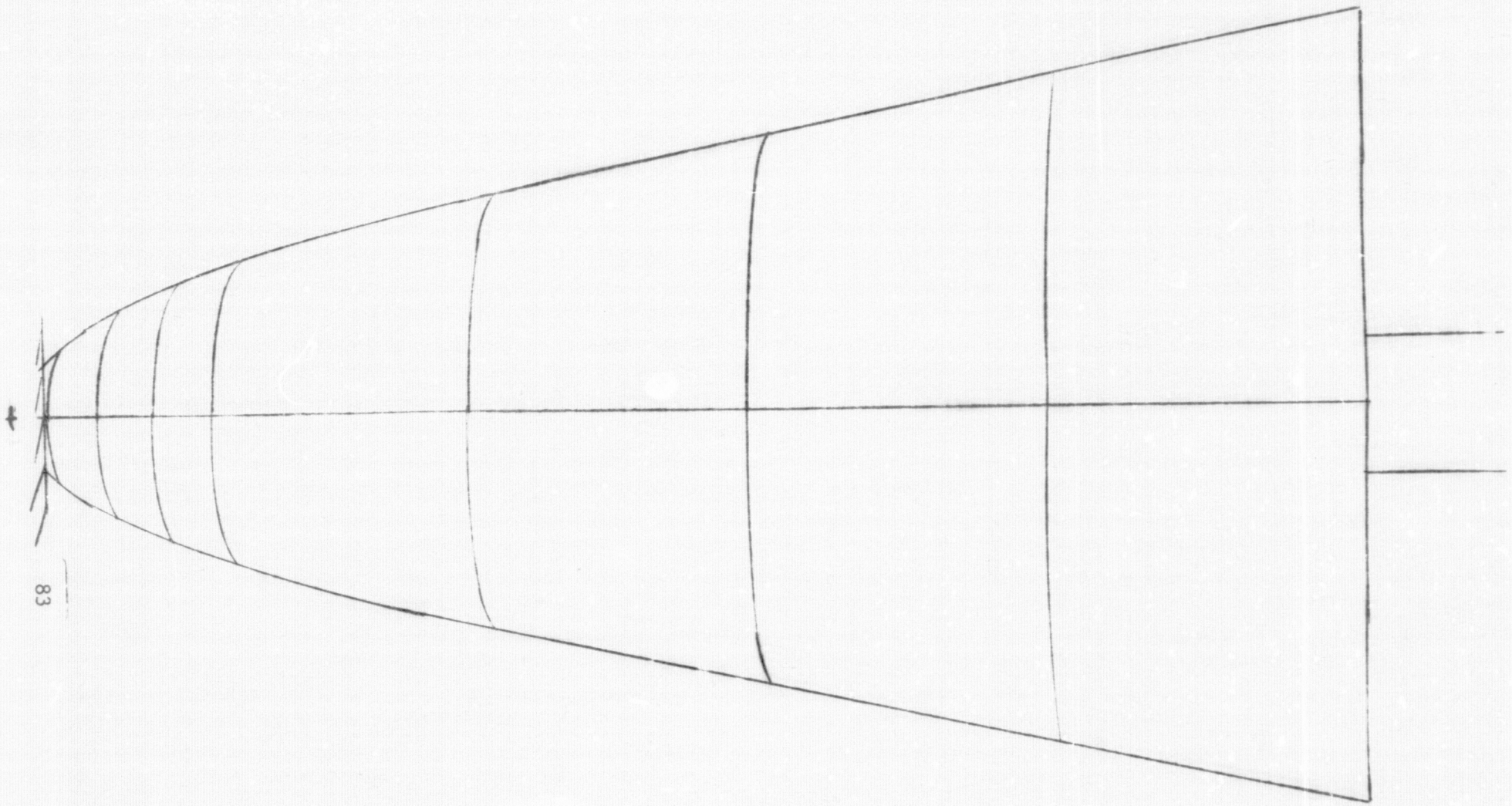
(3) 8579
Frame 8165
$\alpha = 25$
$\psi = 0$



REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

3

OH-DA



(3) 8579
FRAME 8159
$\alpha = 35$
$\psi = 0$

3

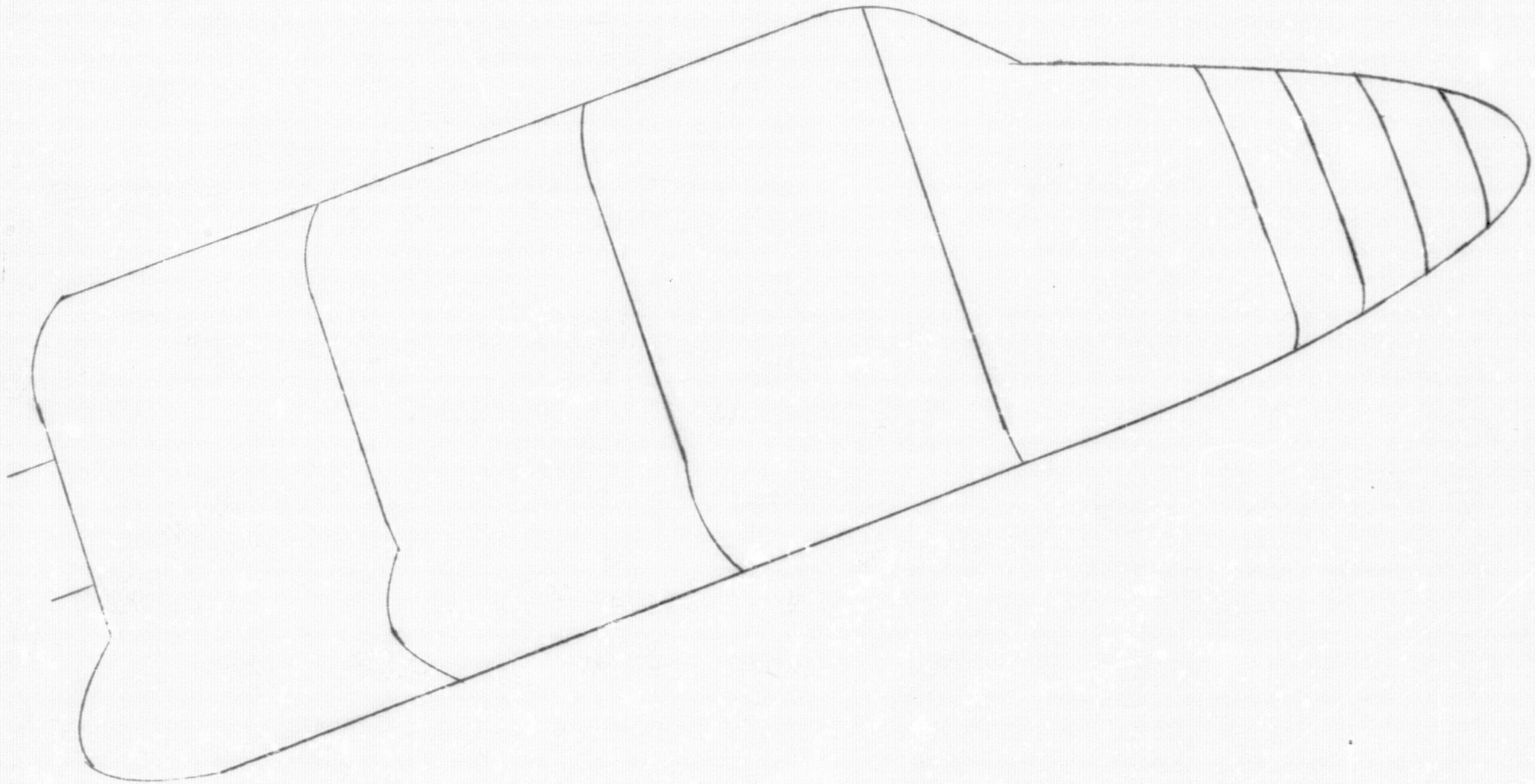
#1-50A

84

8579
FRAME 8156
$\alpha_1 = 40$
$\psi = 0$

(3)

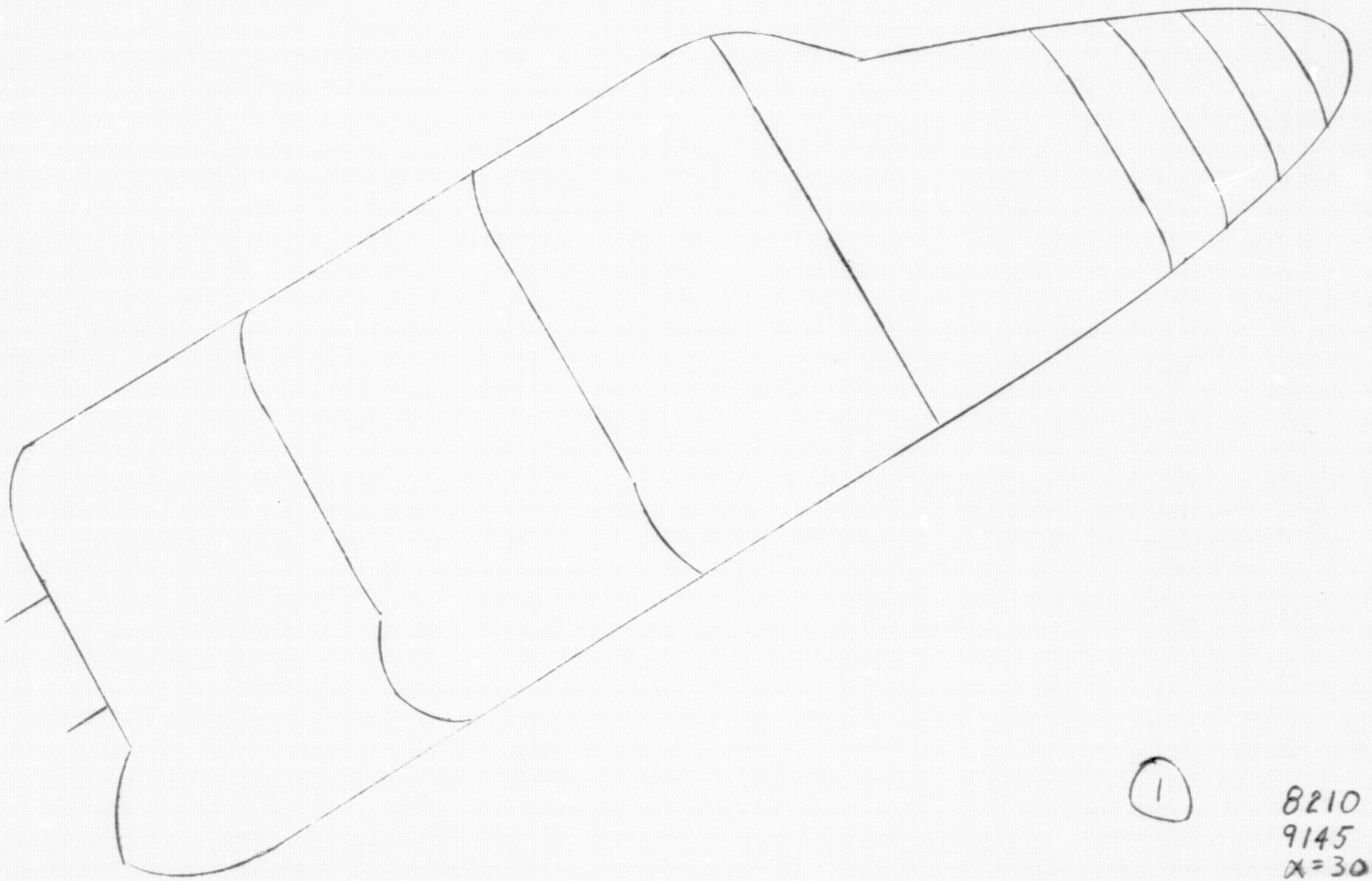
8210
9153
$\alpha = 20$
$\beta = 0$



(1) 8210
9153
$\alpha = 20°$
$\beta = 0°$

(1) 8210
9149
$\alpha = 25°$
$\beta = 0, 1°, -1°$

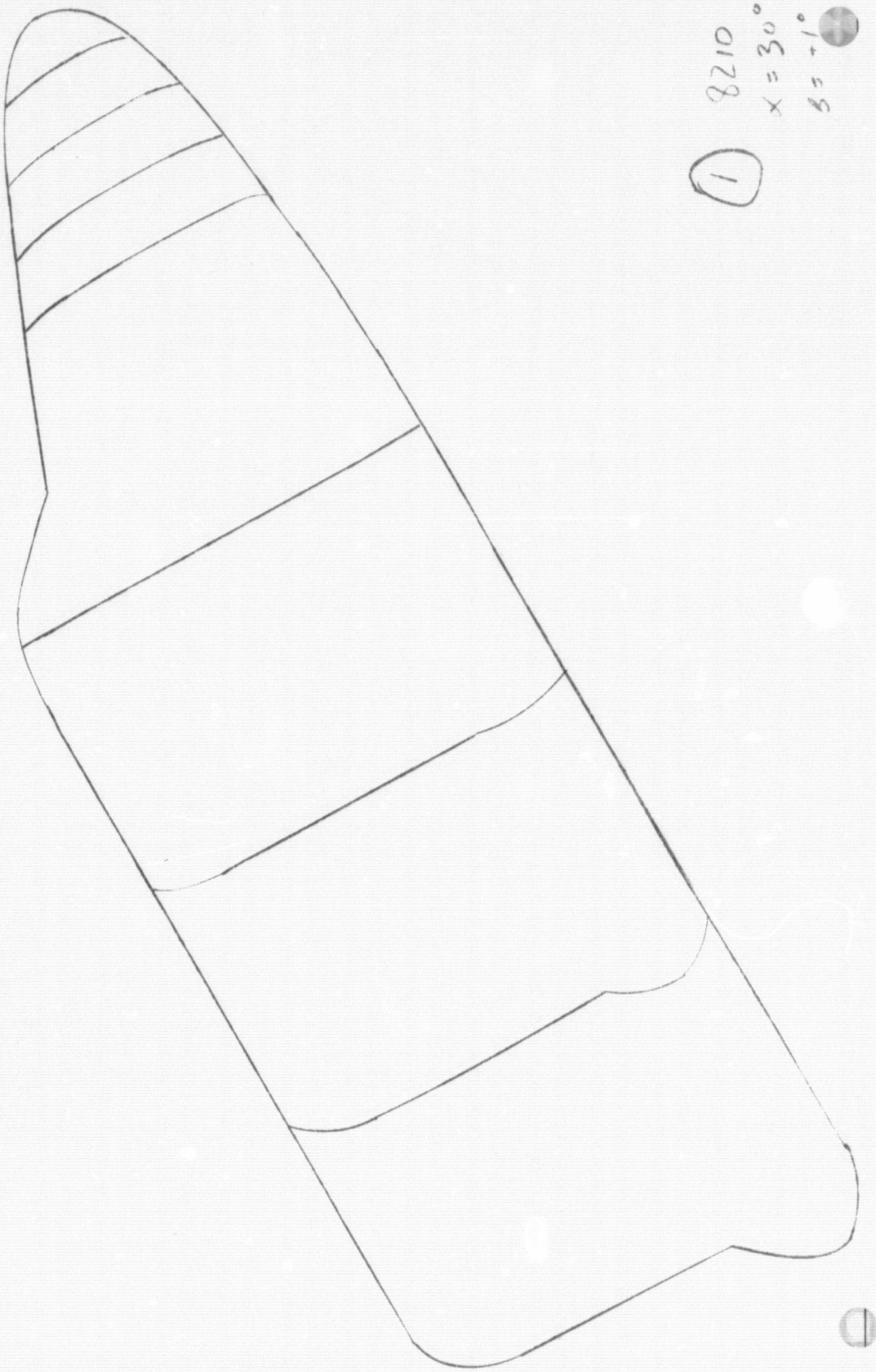
8210
9145
$\alpha = 30$
$\beta = 0$



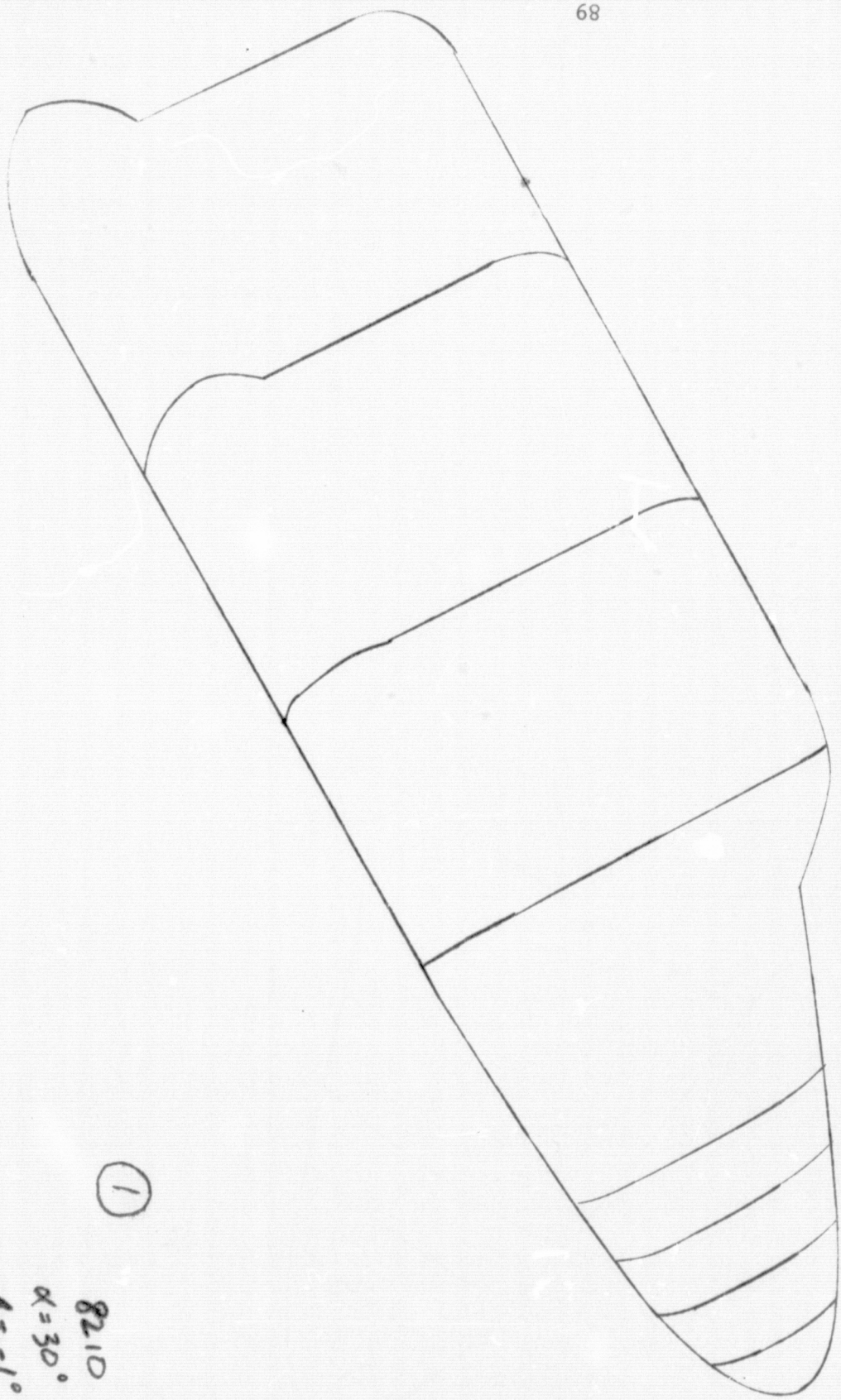
87

(1)

8210
9145
$\alpha = 30°$
$\beta = 0°$



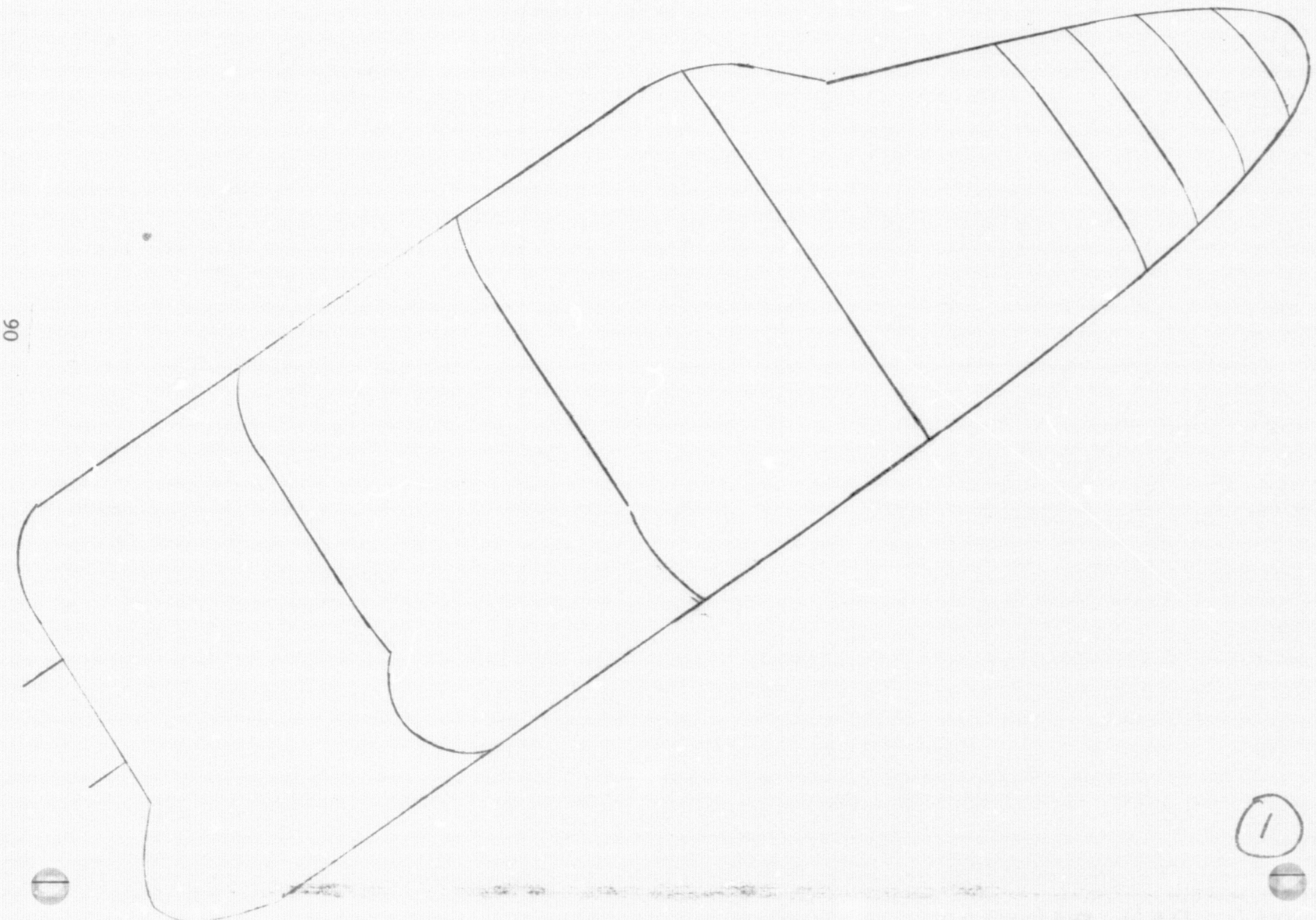
REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



(1)

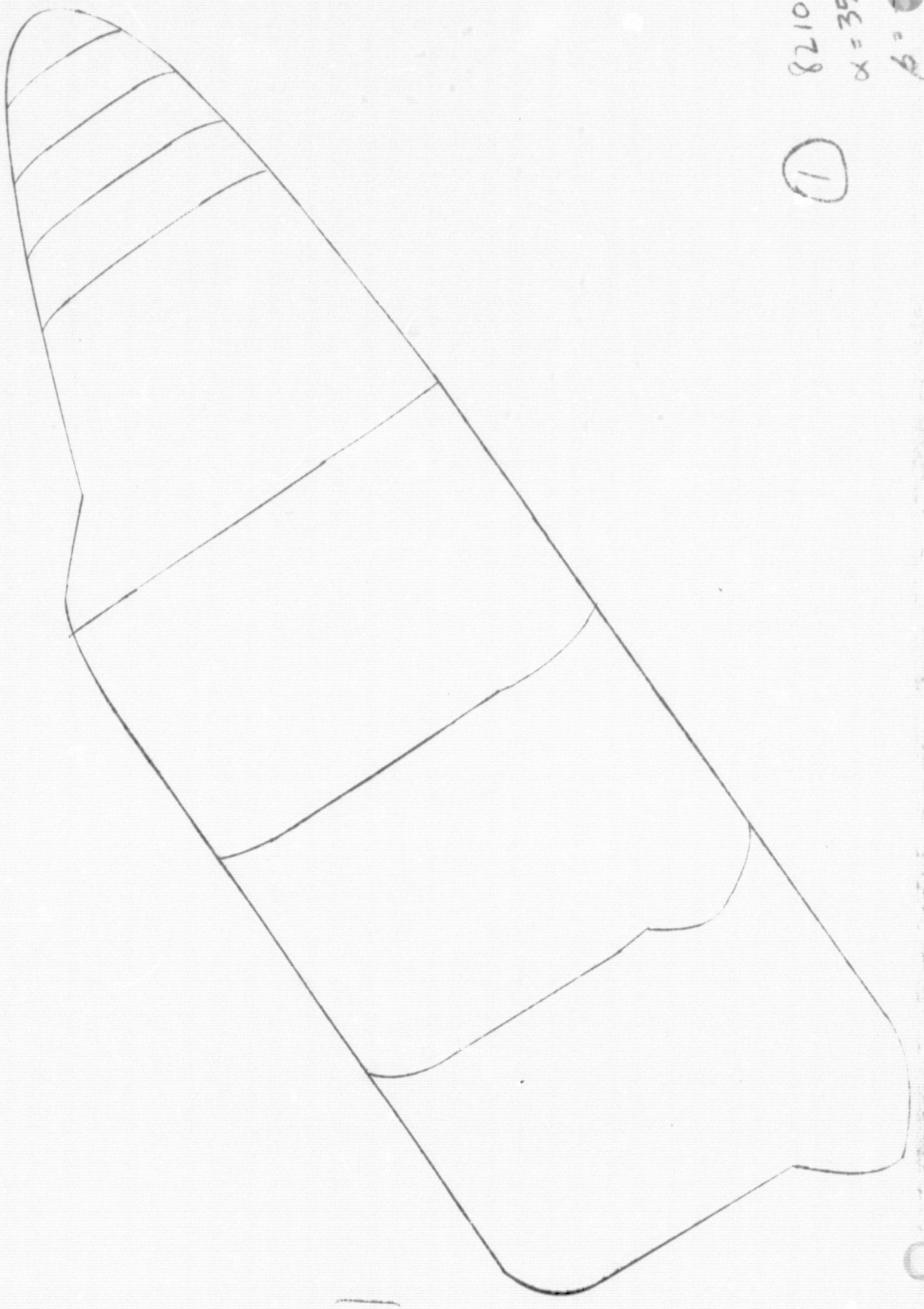
8210
$\alpha = 30°$
$\beta = -1°$

8210
9141
$\alpha = 35$
$\beta = 0$

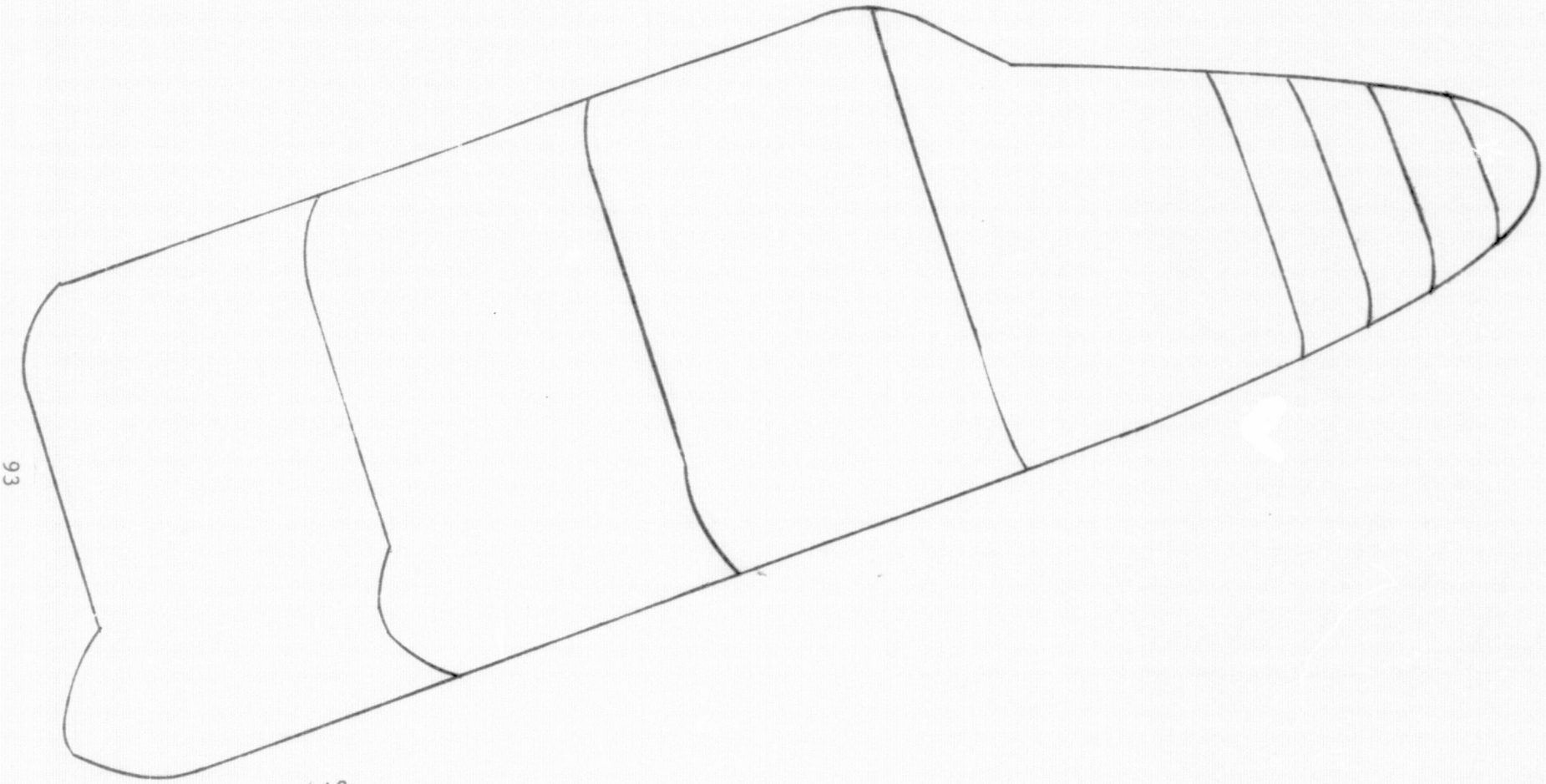


(1) 8210
9141
$\alpha = 35°$
$\beta = 0$

(1) 8210
$\alpha = 35°$
$\beta = -1°$

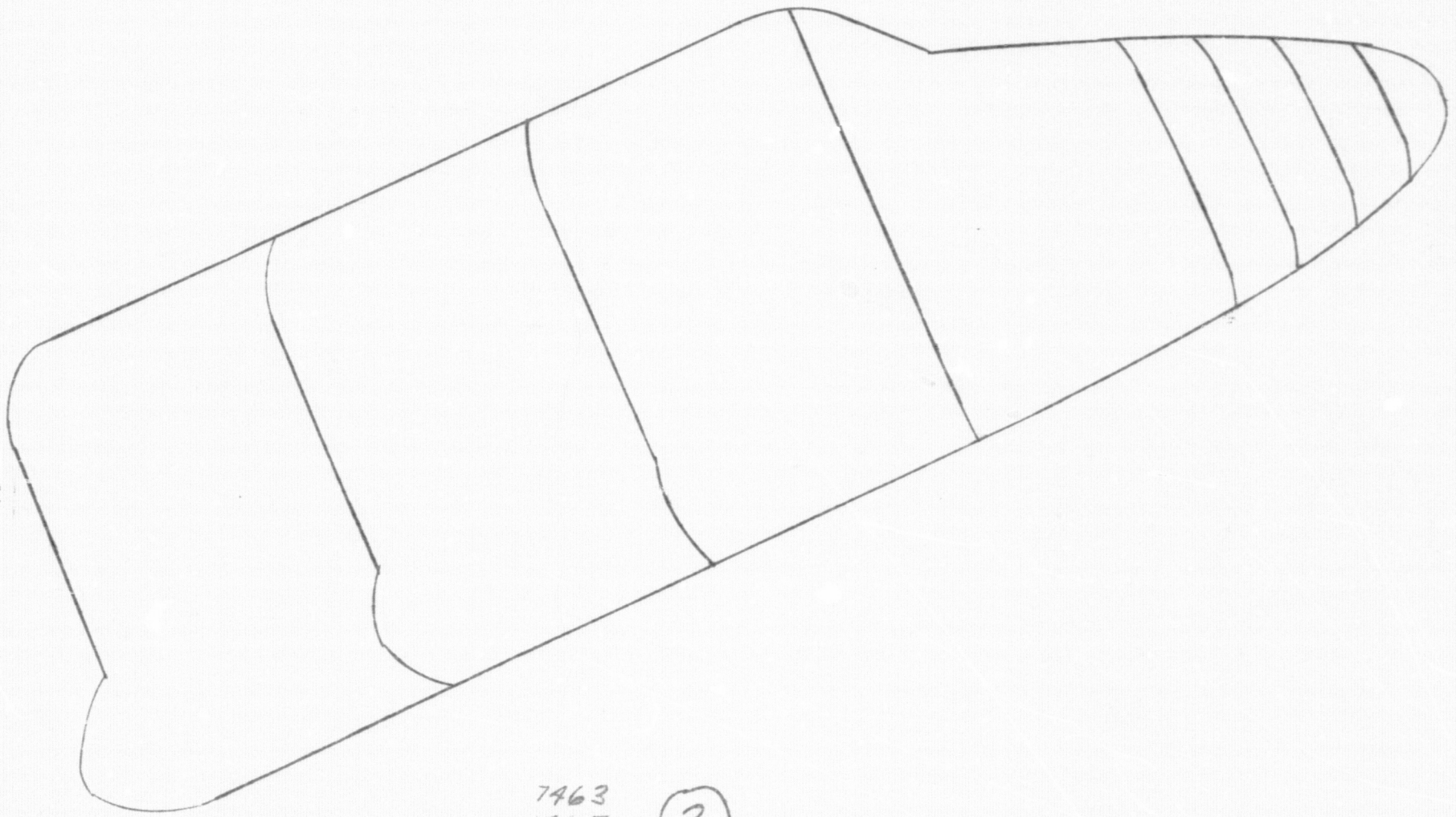


REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



7463
1468
$\alpha_M = 20$
$\psi_M = 0$

(2)



94

7463
1465

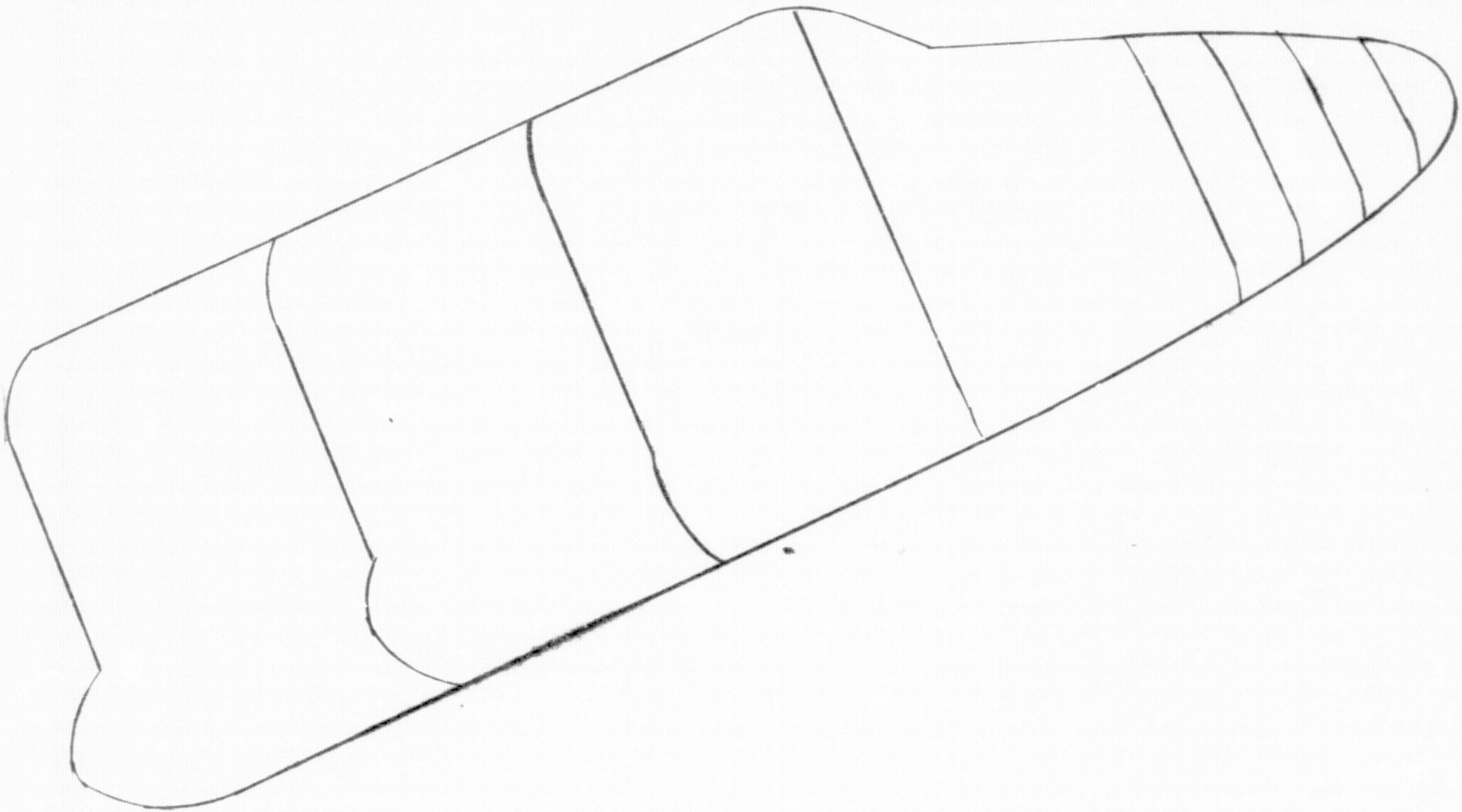
(2)

$\alpha_m = 25$

$\psi_m = 0$

2

OH50A



95

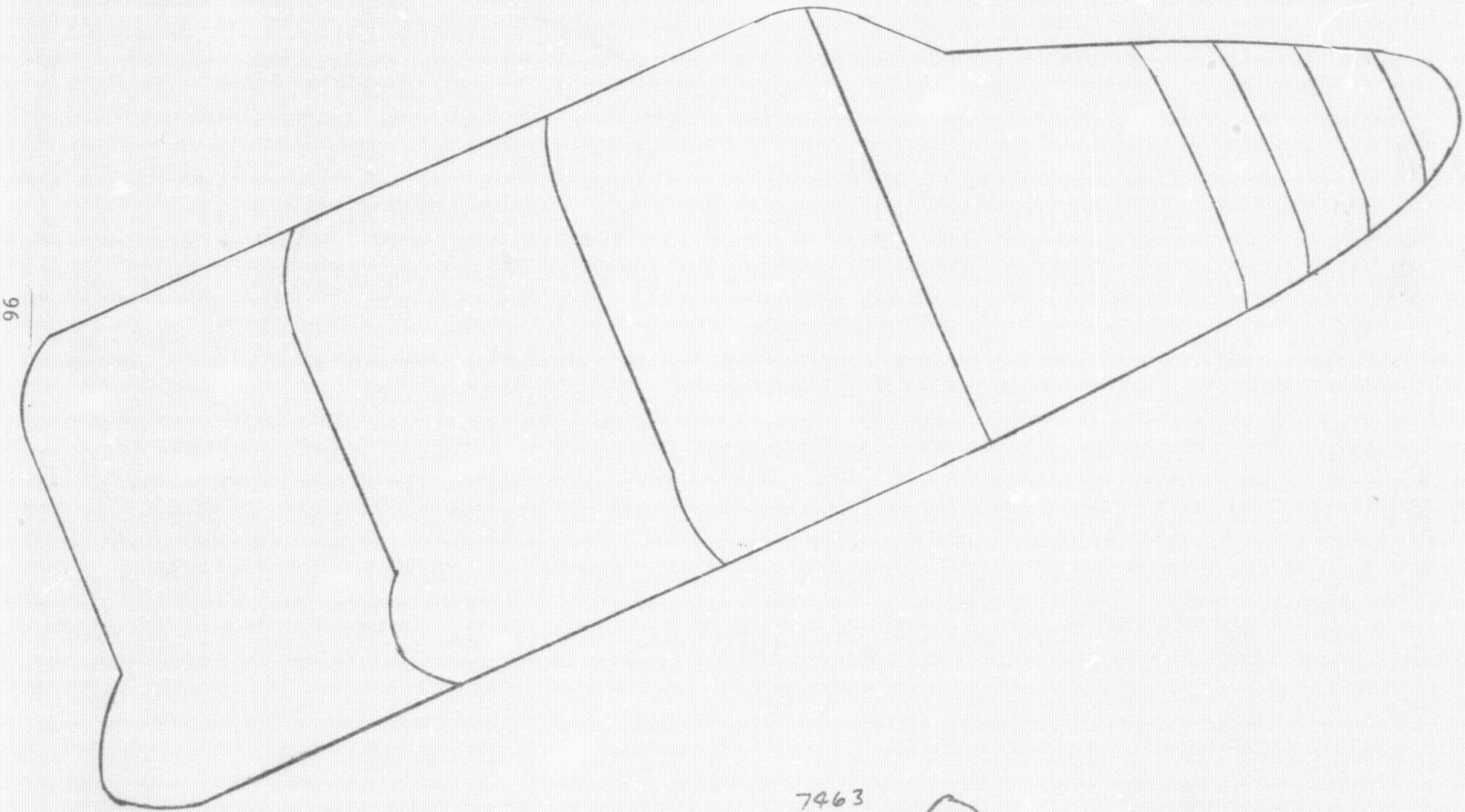
1963
1976
$K_h = .25$

(2)

2

C_{n50A}

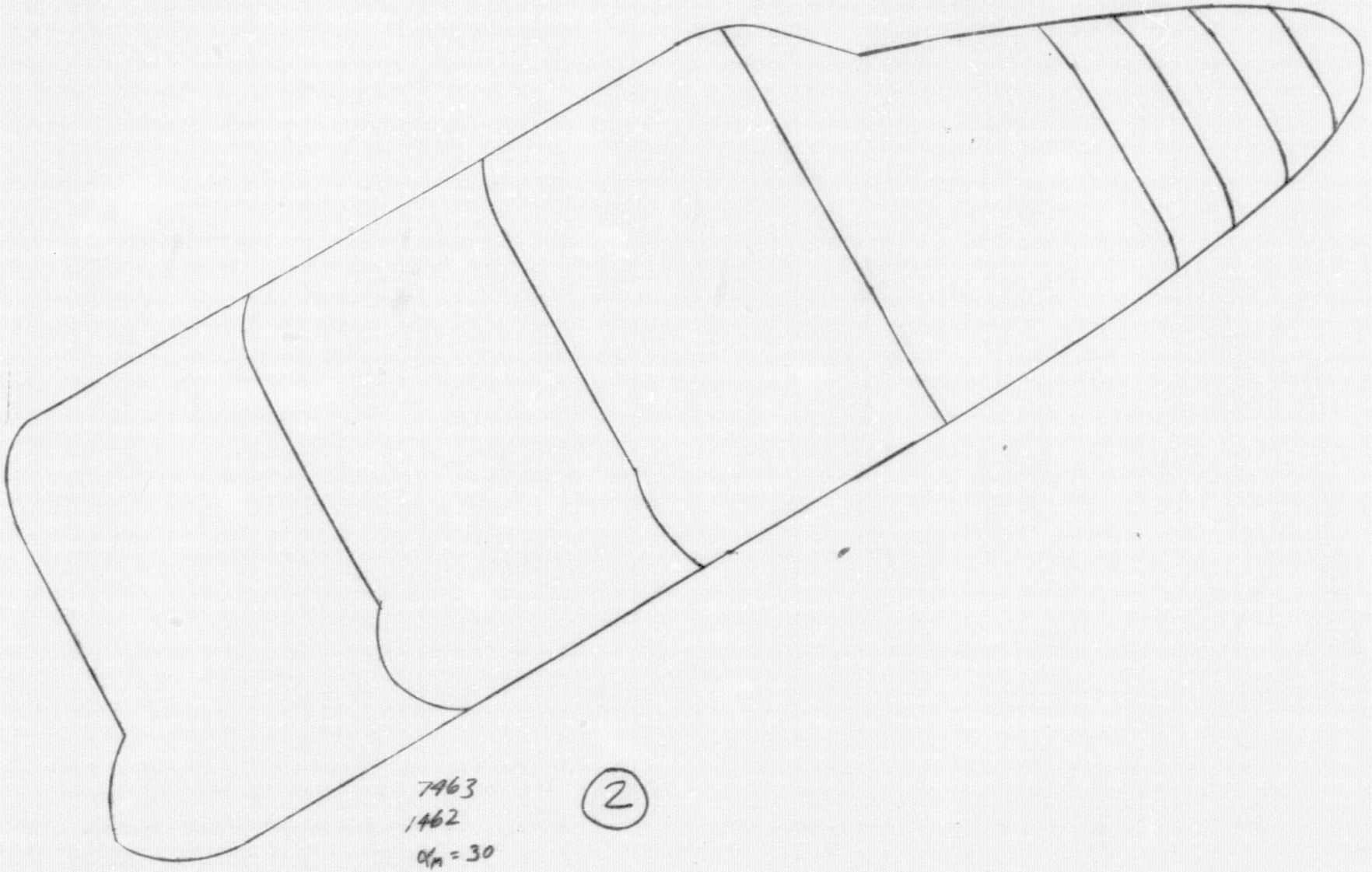
C-21



96

7463
1473
$\alpha_M > 25$
$\psi_M > -1$

(2)

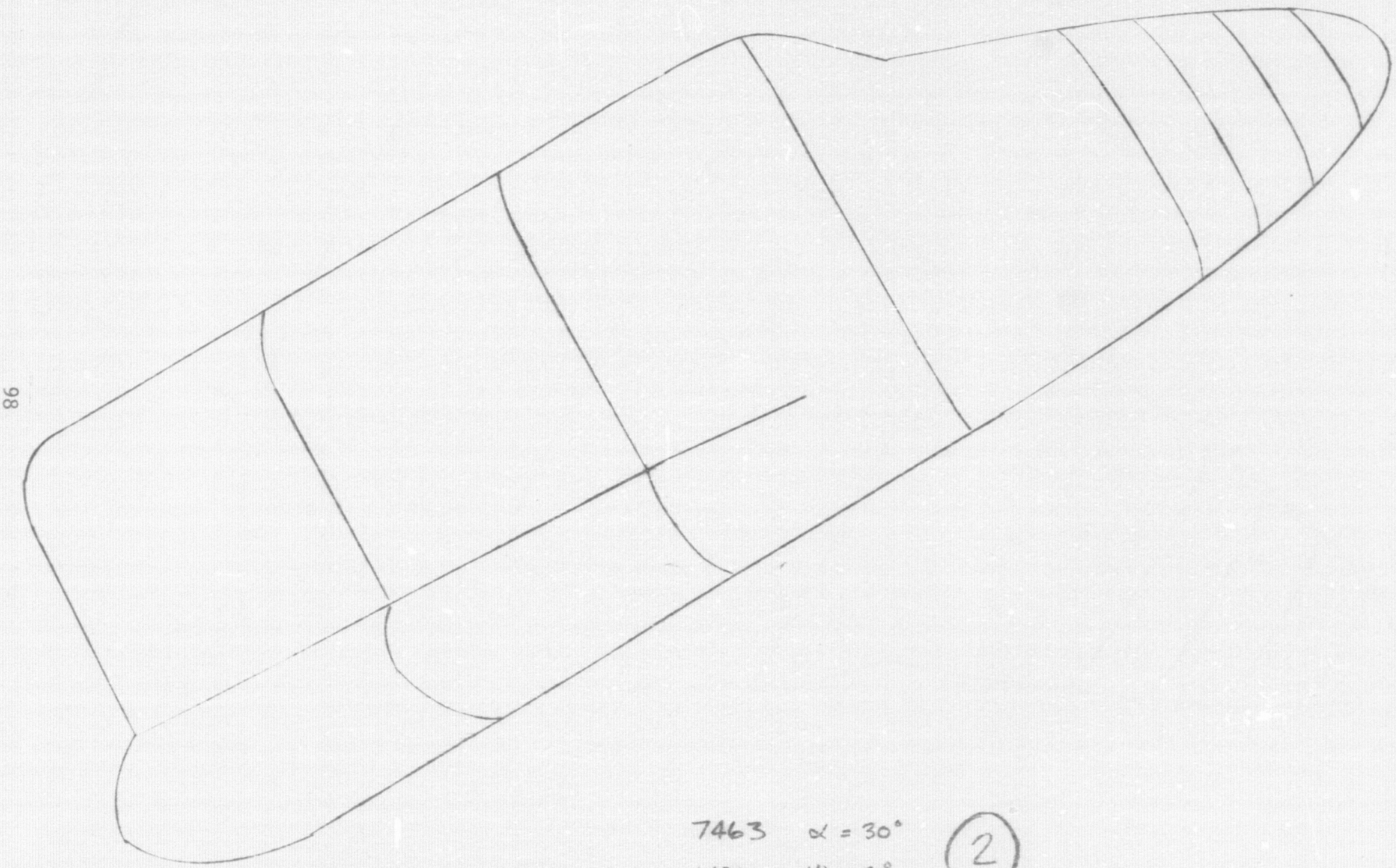


97

7463
1462
$\alpha_m = 30$
$\phi_m = 0, -1, +1$

(2)

OH50A



7463 $\alpha = 30°$

1488 $\psi = +2°$

(2)

2

0. x0 A

99

7463 $\alpha = 30°$

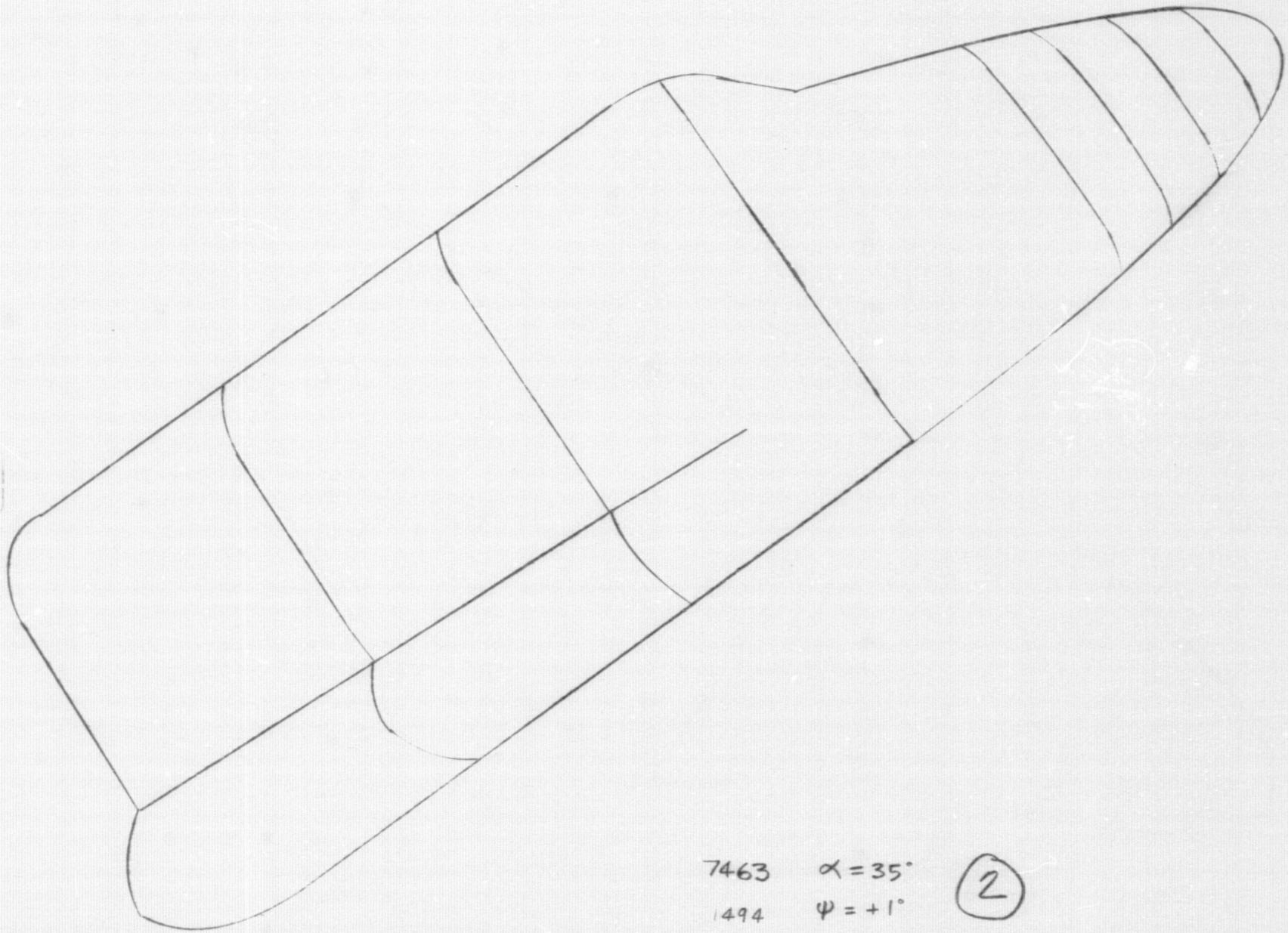
1485 $\psi = -2°$

(2)

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

(2)

7463
1460
$\alpha_M = 35°$
$\psi_M = 0$



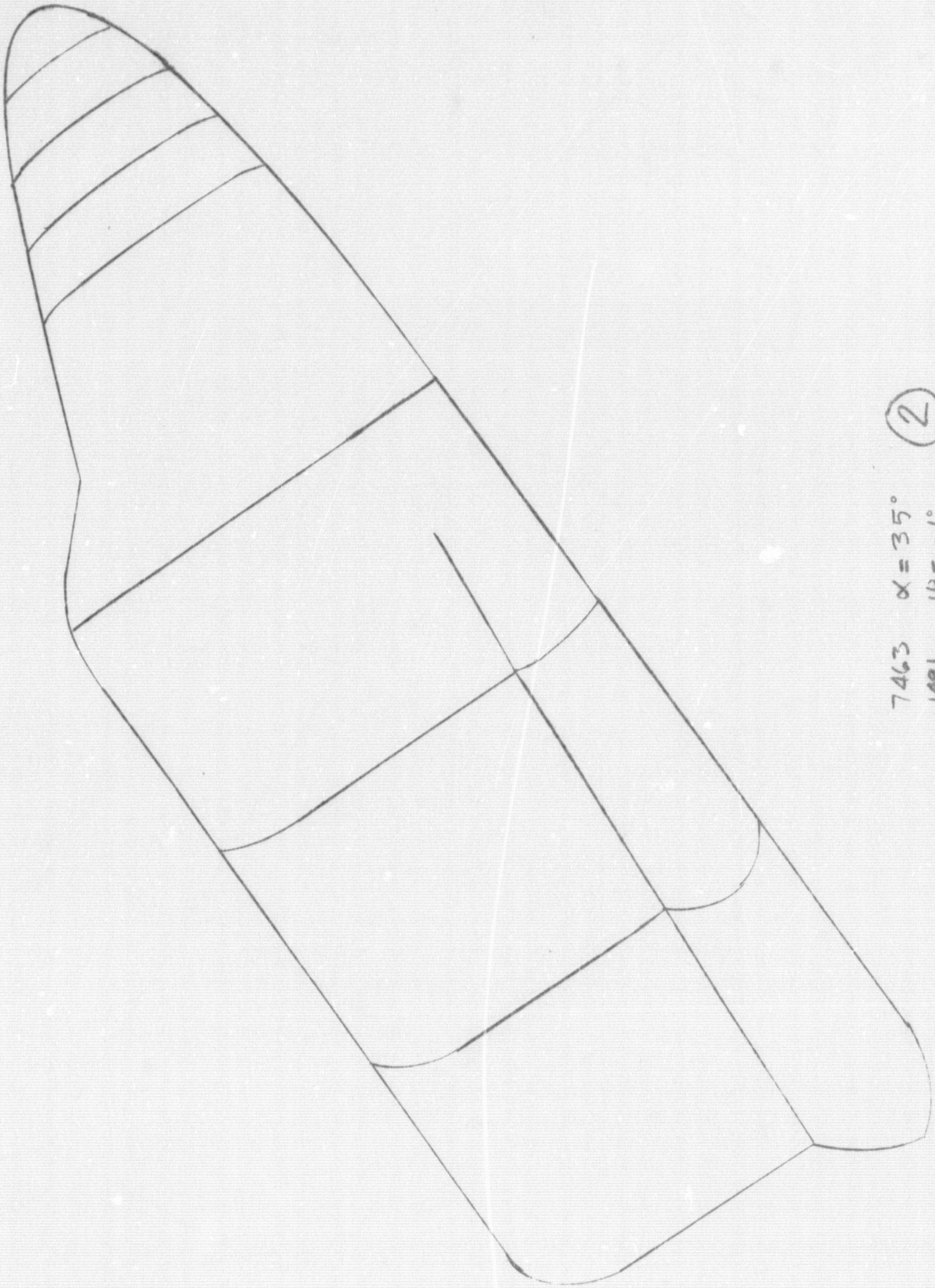
101

7463 $\alpha = 35°$

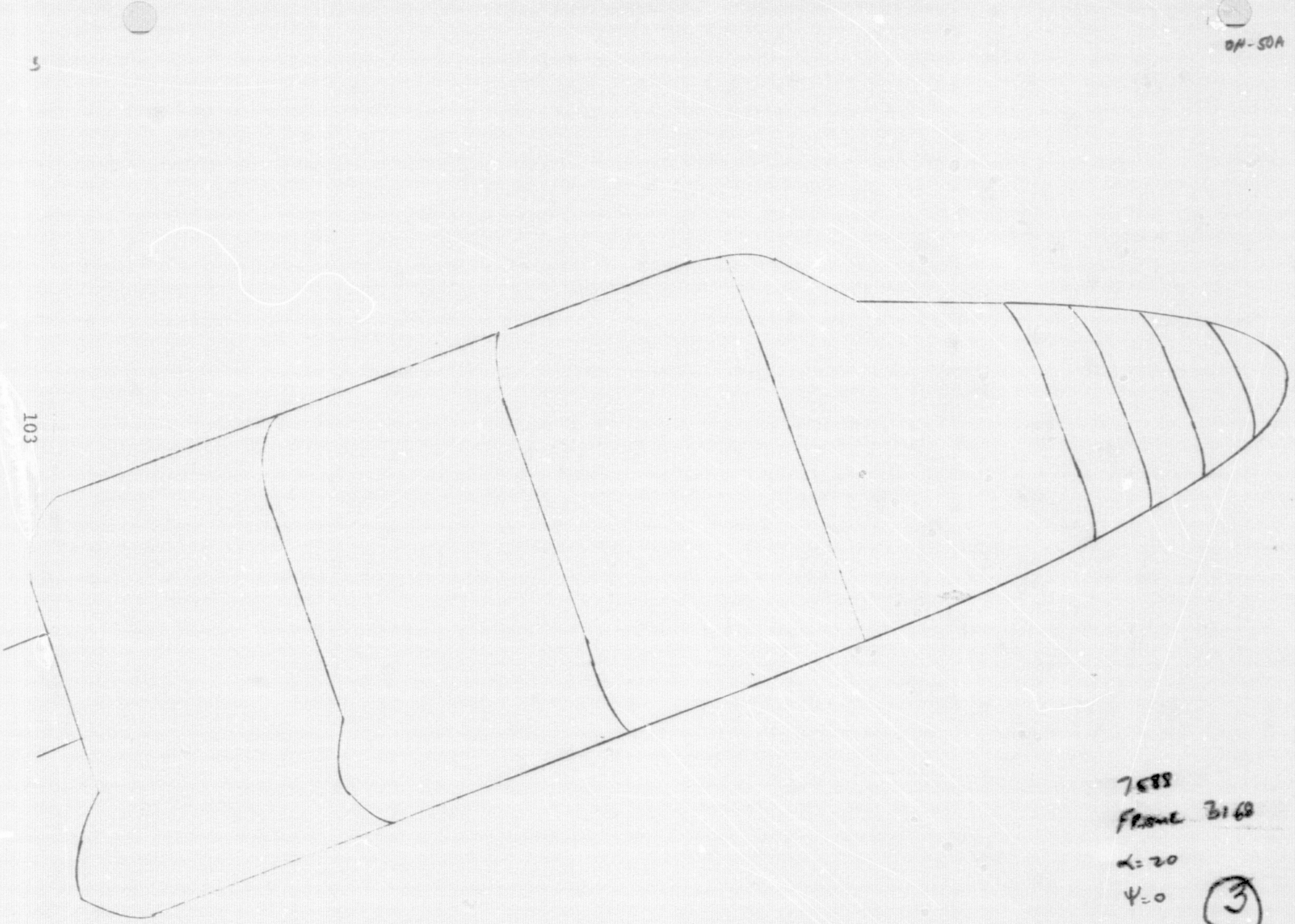
1494 $\psi = +1°$

(2)

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



7463 $\alpha = 35°$ (2)
1491 $\psi = -1°$


DM-50A
5
103
7588
FRAME 3168
α=20
ψ=0
3

3

GH-SDA



104

7588
FRAME 3165
$\alpha = 25$
$\psi = 0$

(3)

3

OH

105

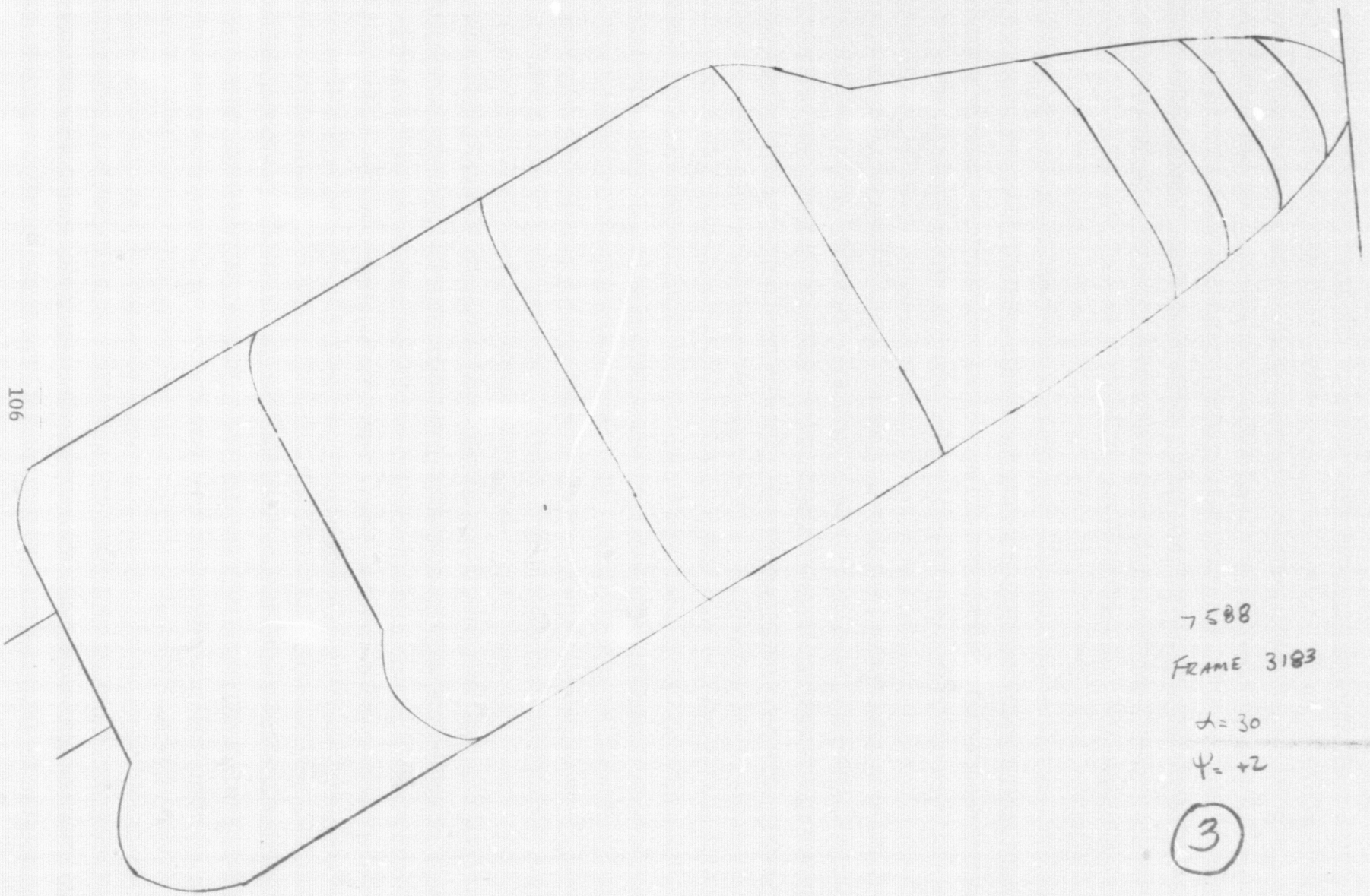
7588
FRAME 3162

$\alpha = 30$
$\psi = 0$

(3)

SH-50A

3



106

7588

FRAME 3183

$\alpha = 30$

$\psi = +2$

(3)

7588

FRAME 3159

$\alpha = 35$

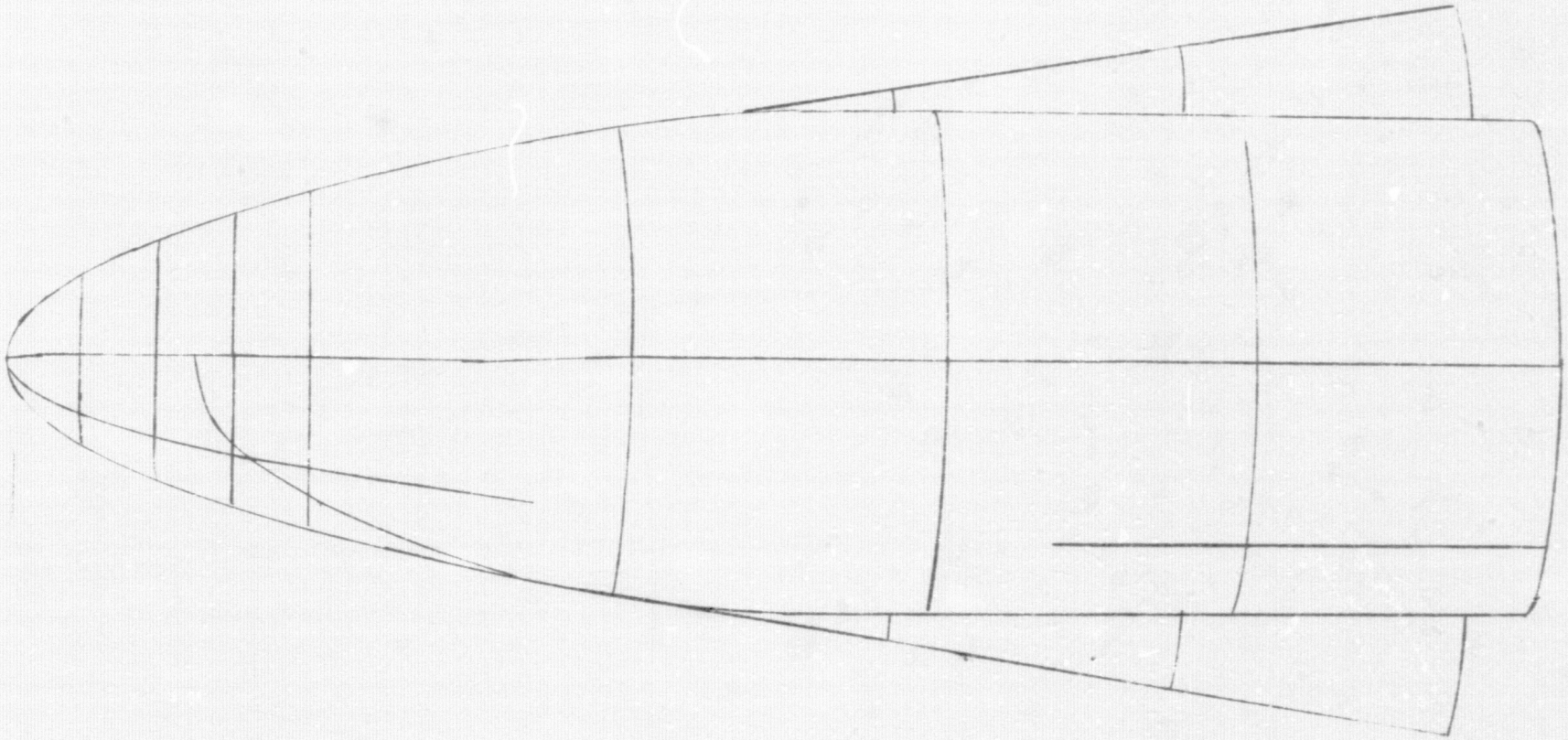
$\psi = 0$

(3)

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

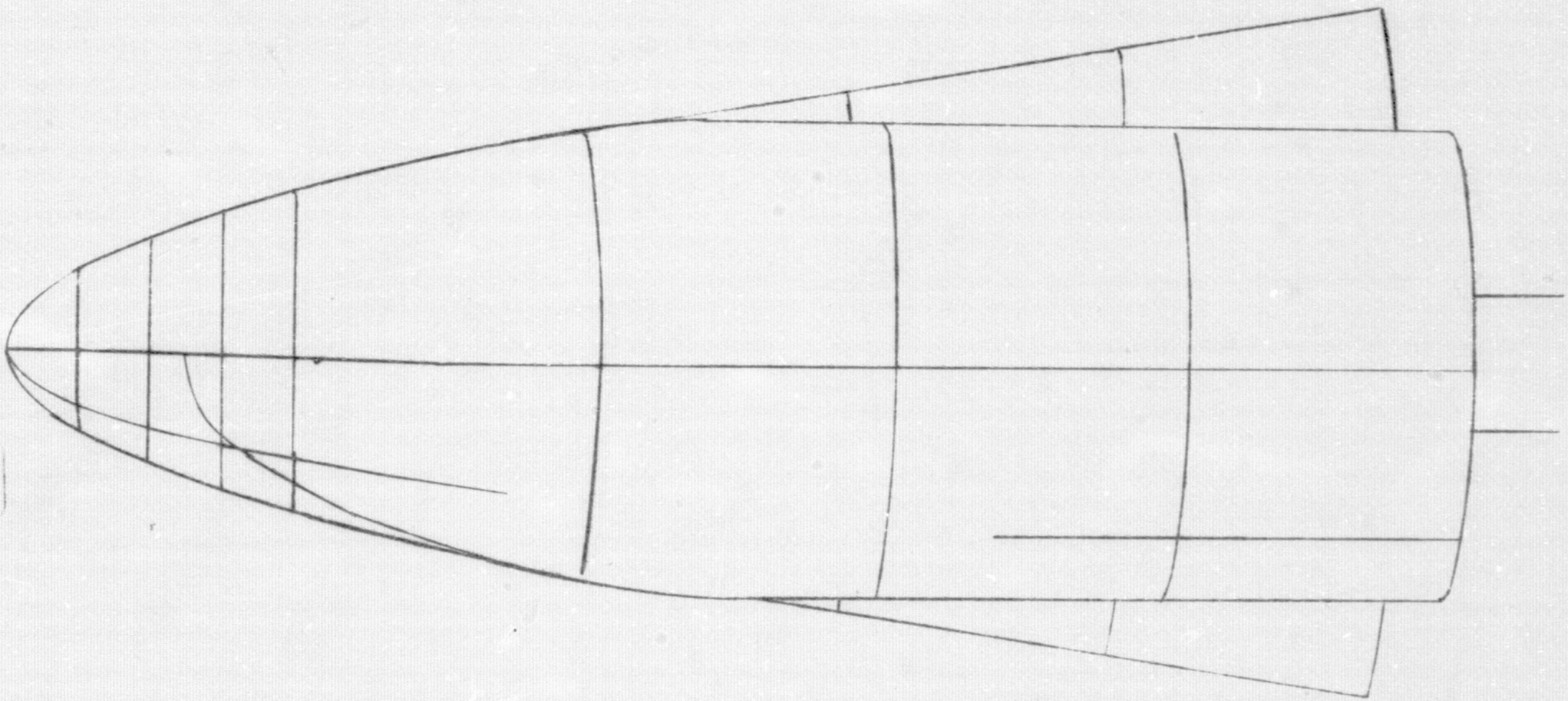
7688
FRAME 3156
$\alpha = 40$
$\psi = 0$

(3)



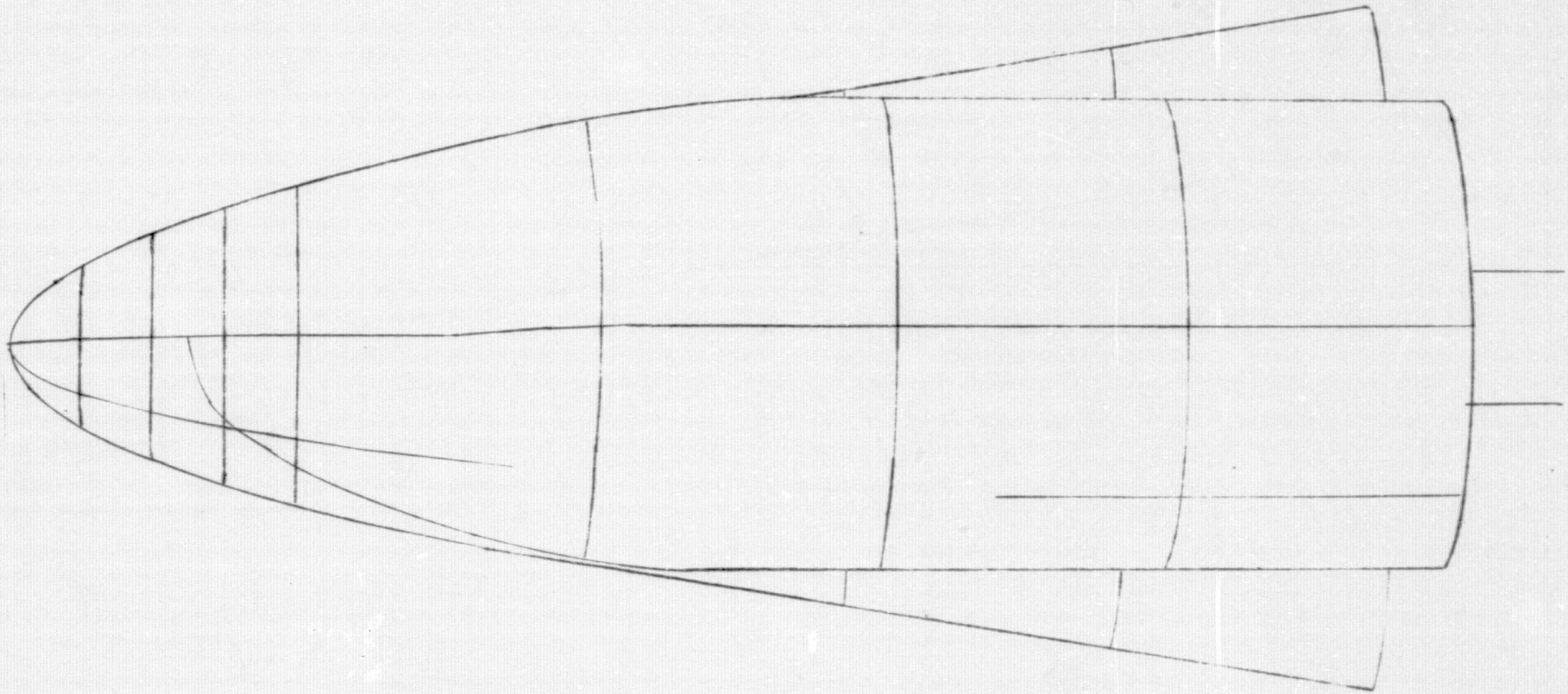
(1)

7487
FRAME 1950
$\alpha = 25$
$\psi = 0$



(1)

7487
FRAME 1962
$\alpha = 25$
$\psi = +1$



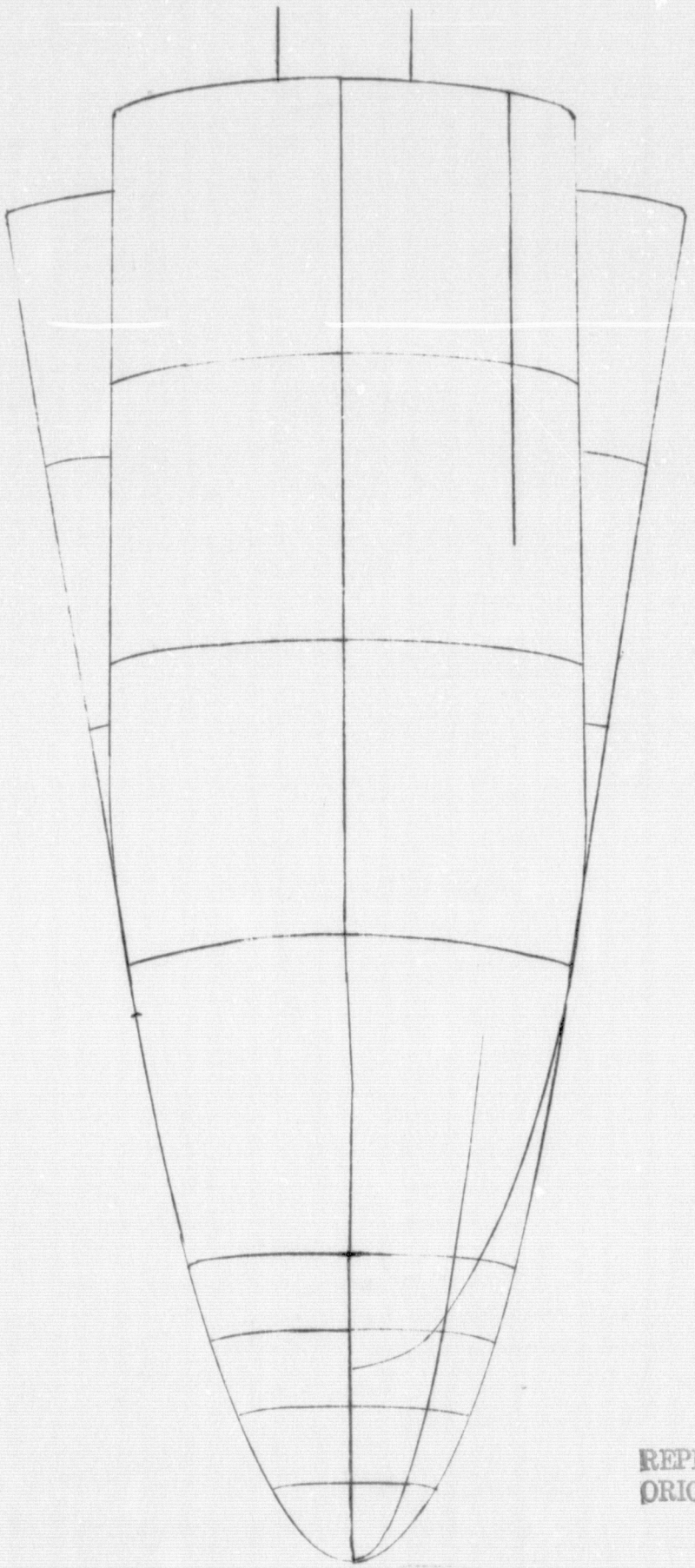
7487

FRAME 1958

$\alpha = 25$

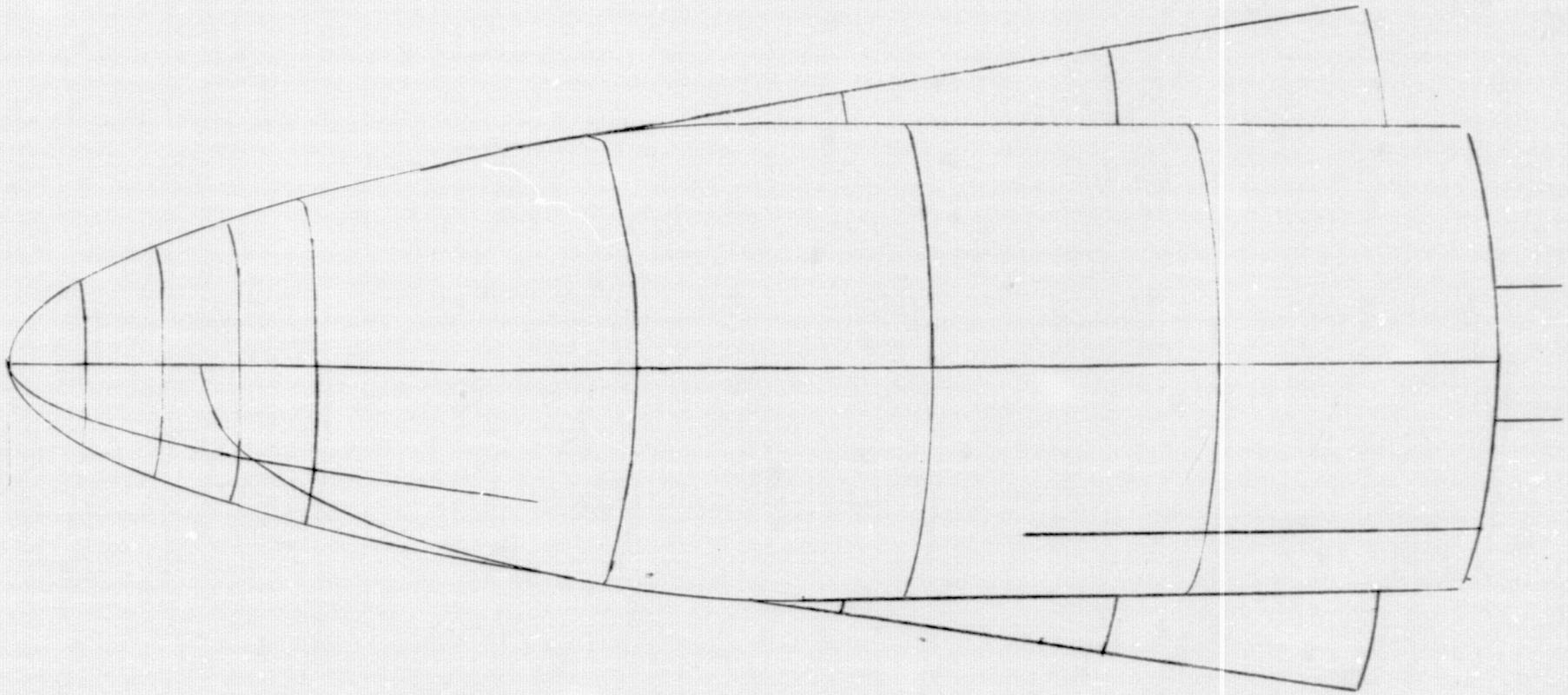
$\psi = -1$

JH-504

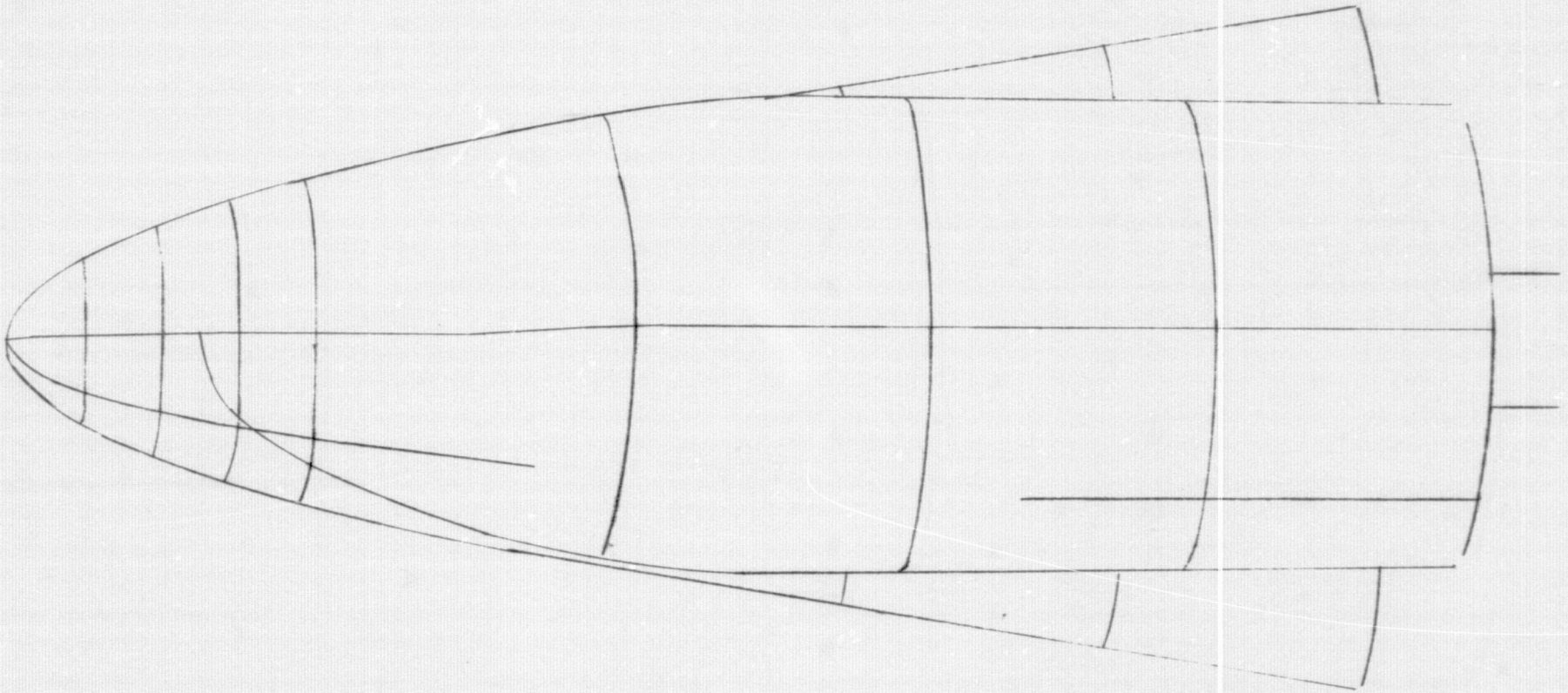


7487
FRAME 1946
α = 30
ψ = 0
(1)

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



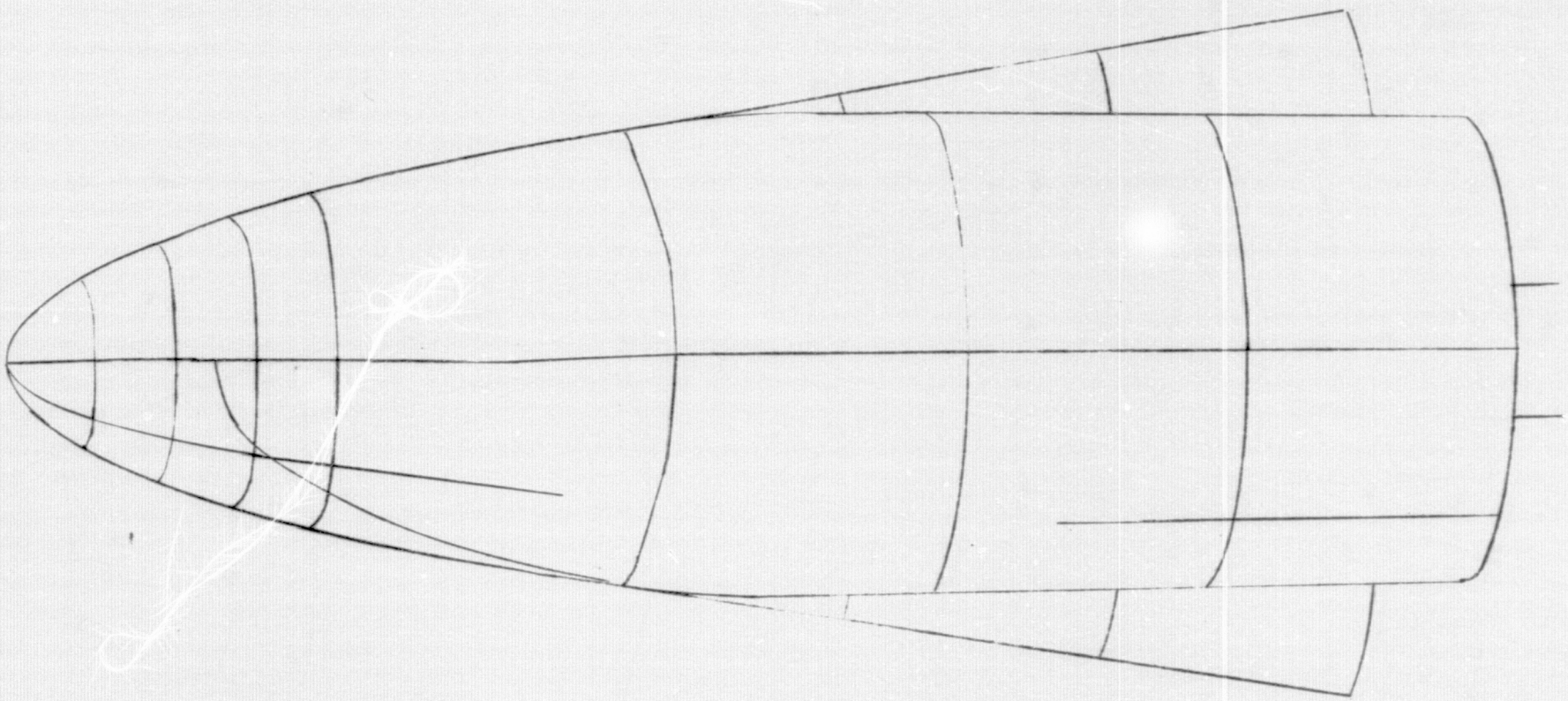
7487
Frame 1972
$\alpha = 30$
$\psi = +1$



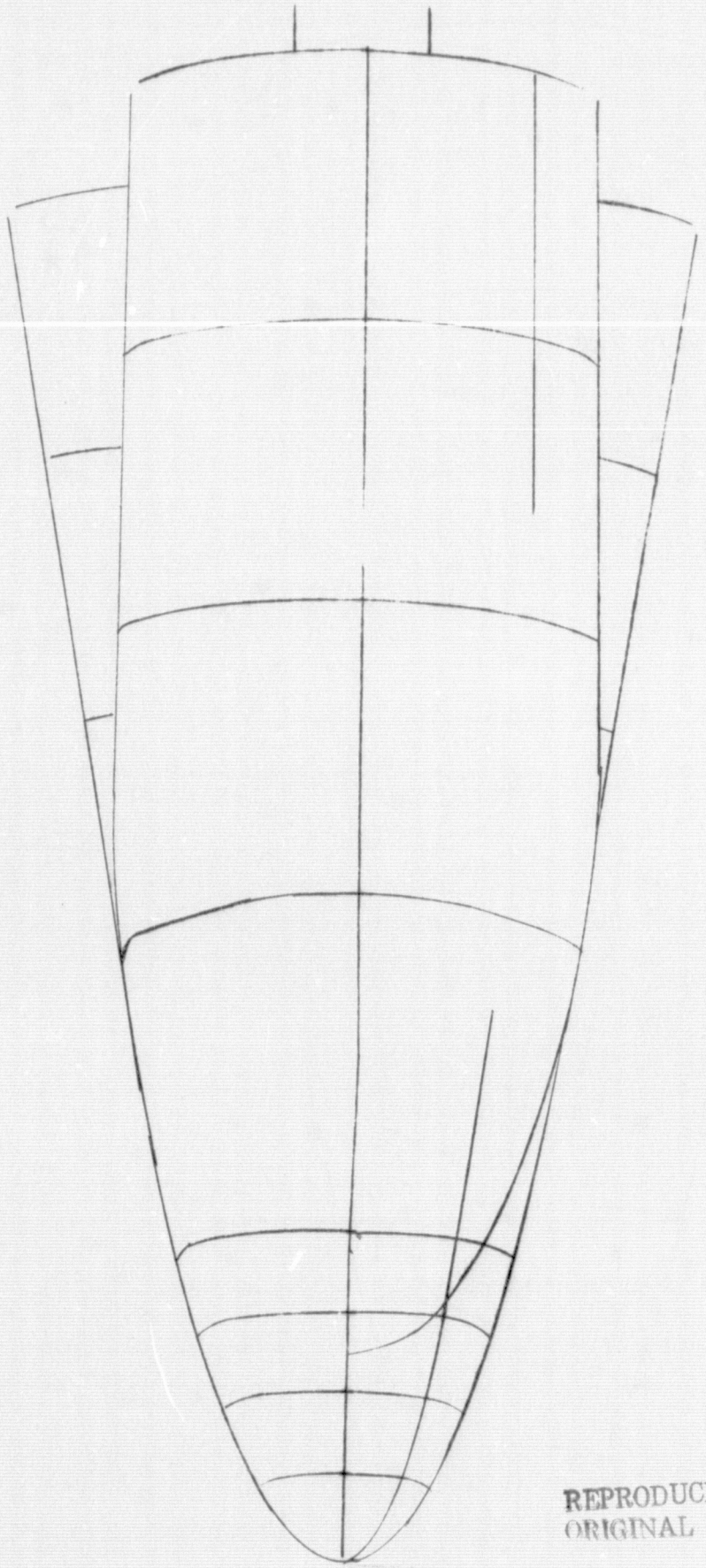
114

(1)

7487
FRAME 1568
$\alpha = 30$
$\psi_0 \quad -1$



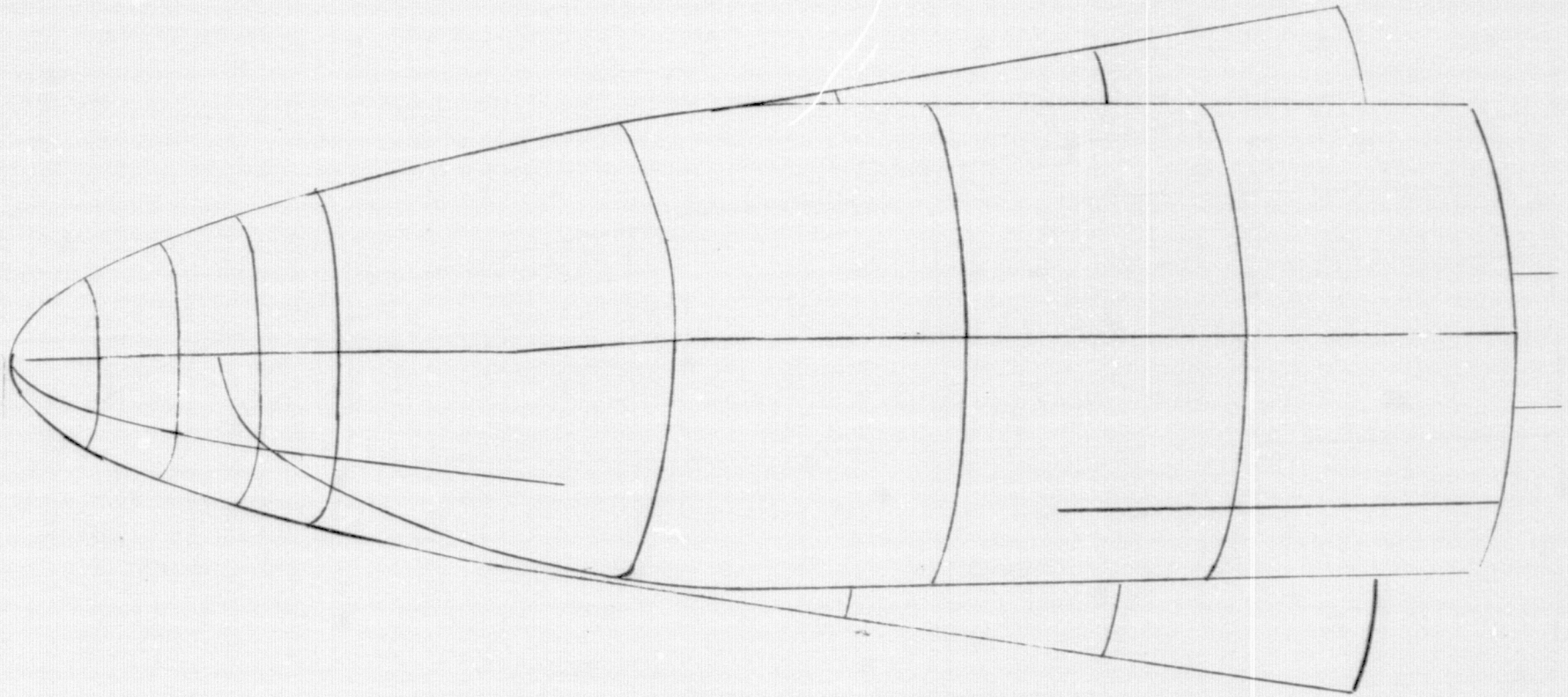
(1) 7487
FRAME 1942
$\alpha = 35$
$\Psi = 0$



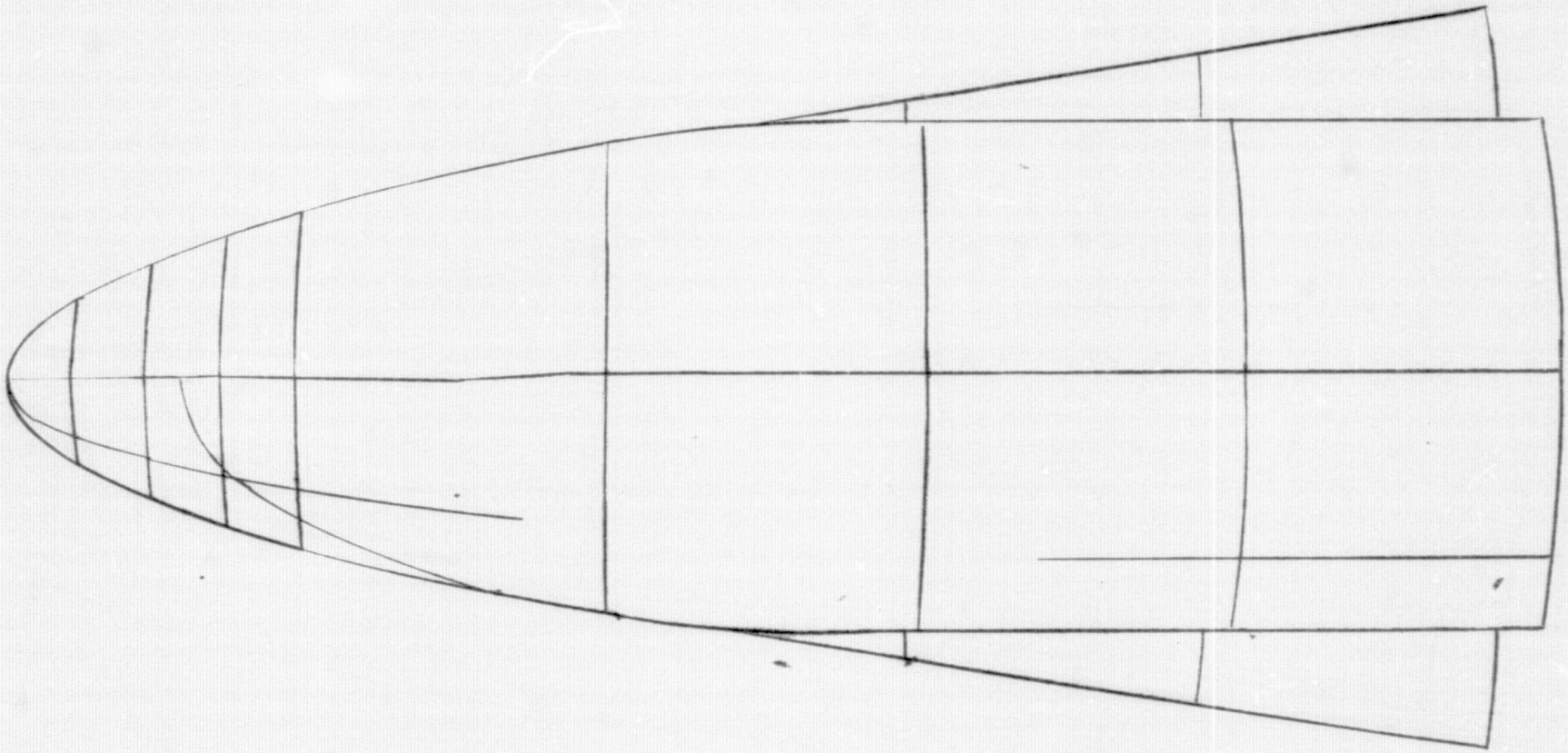
7497
Frame 1980
(1)
$\alpha = 35$
$\psi = +1$

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ORIGINAL PAGE IS POOR

CH-5DA



(1) 7487
FRAME 1984
$\alpha = 35$
$\psi = -1$

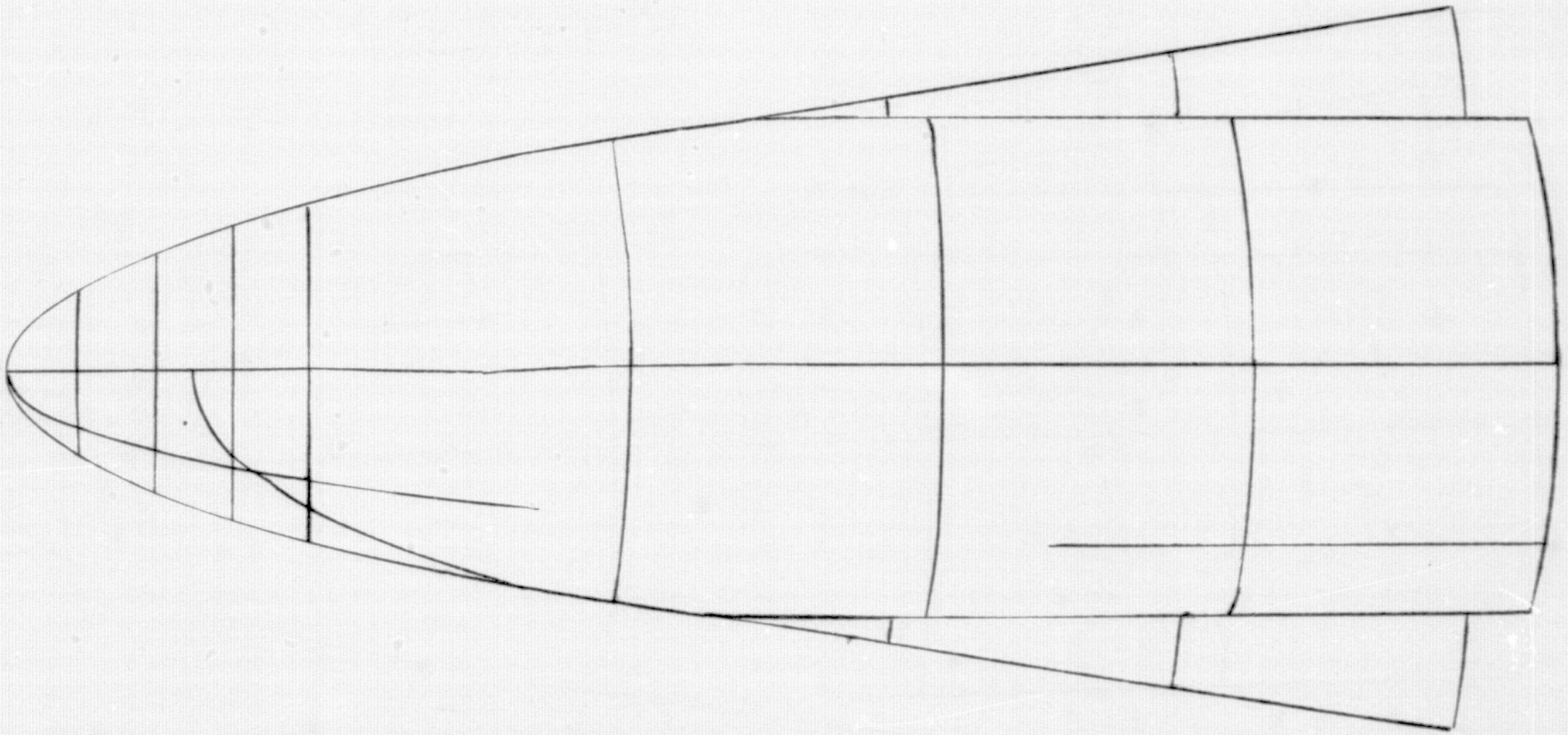


9424 $\alpha = 20°$

3529 $\psi = 0°$

(2)

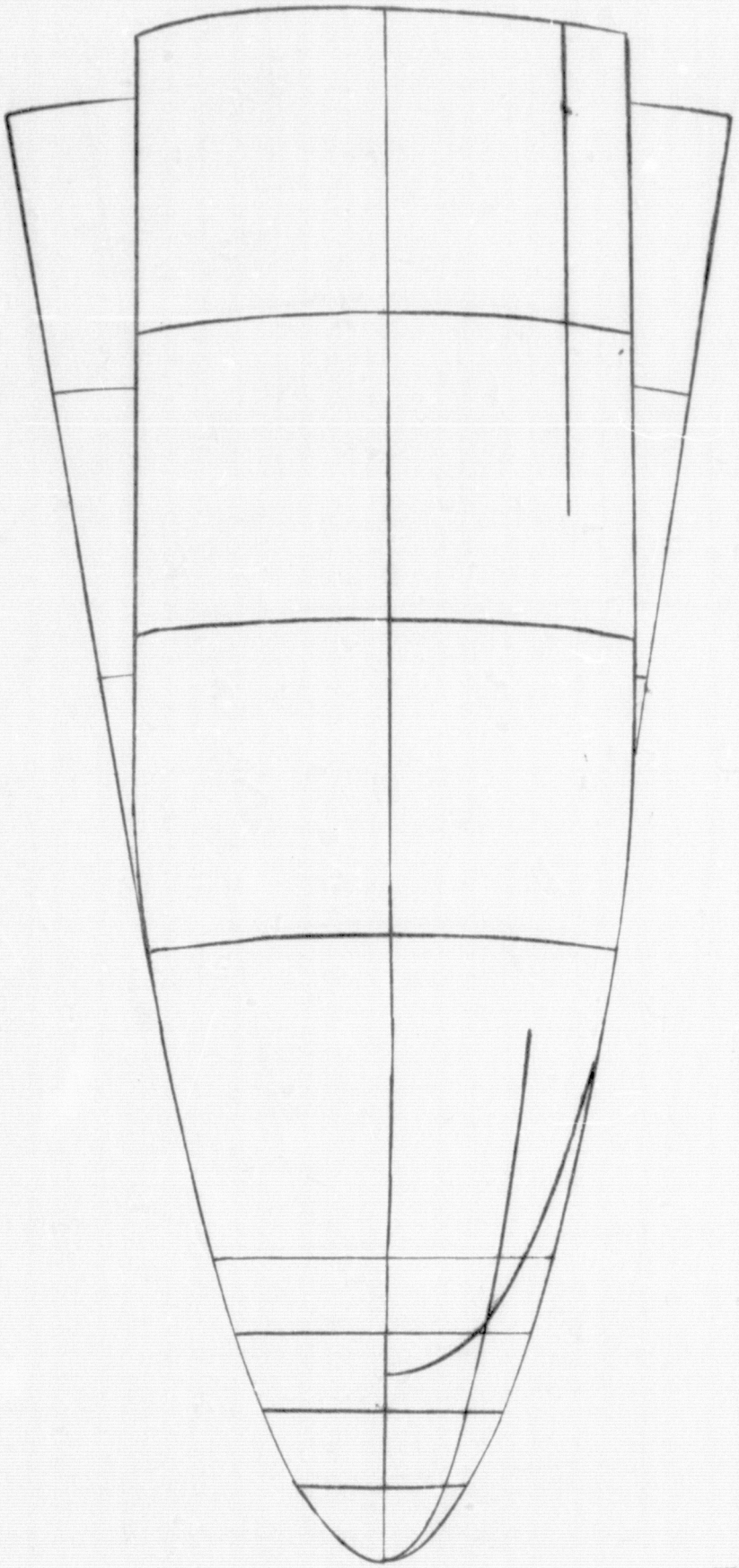
2



119

8424 $\alpha = 25°$ (2)

3526 $\psi = 0°$

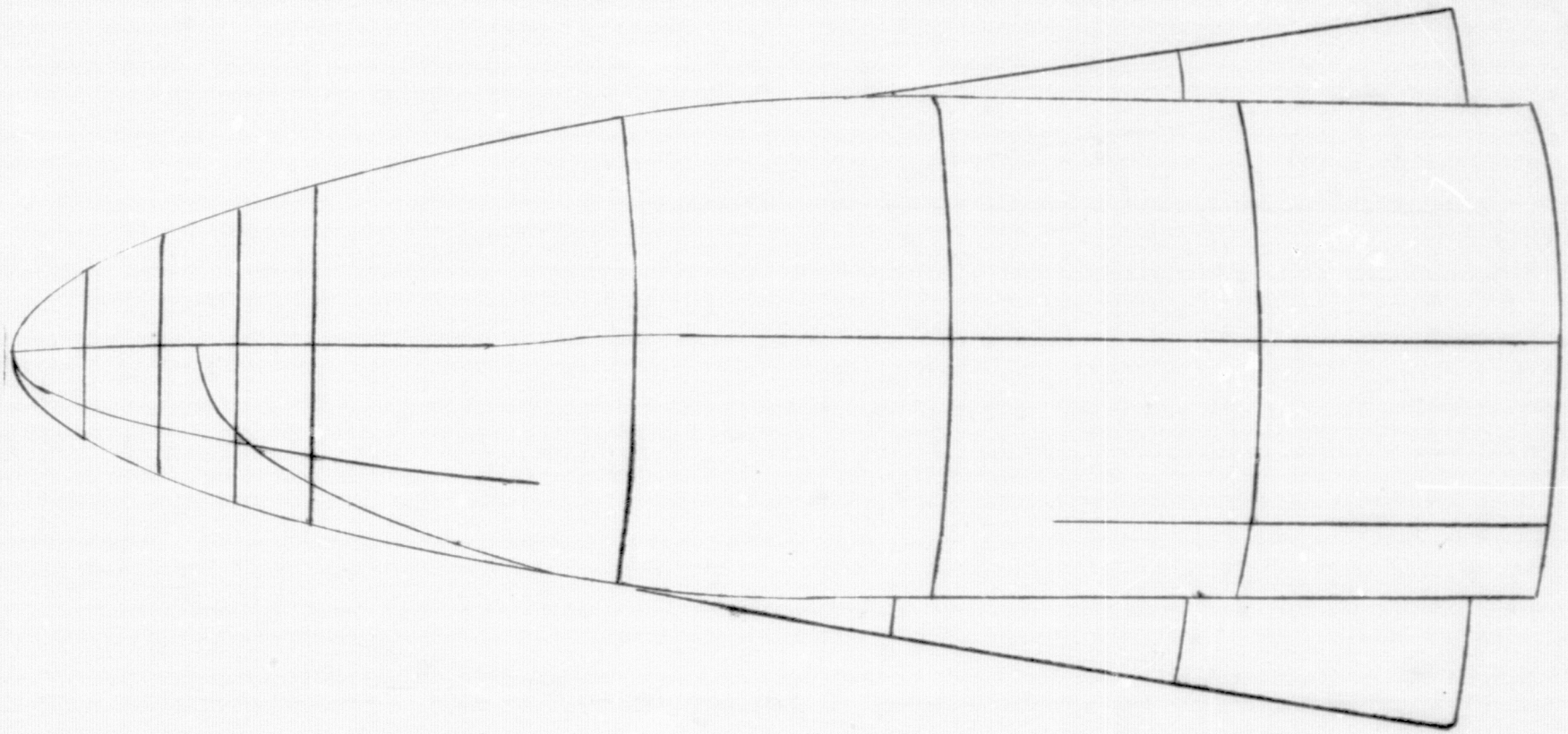


8424 $\alpha = 25°$ (2)
3537 $\psi = +1°$

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

2

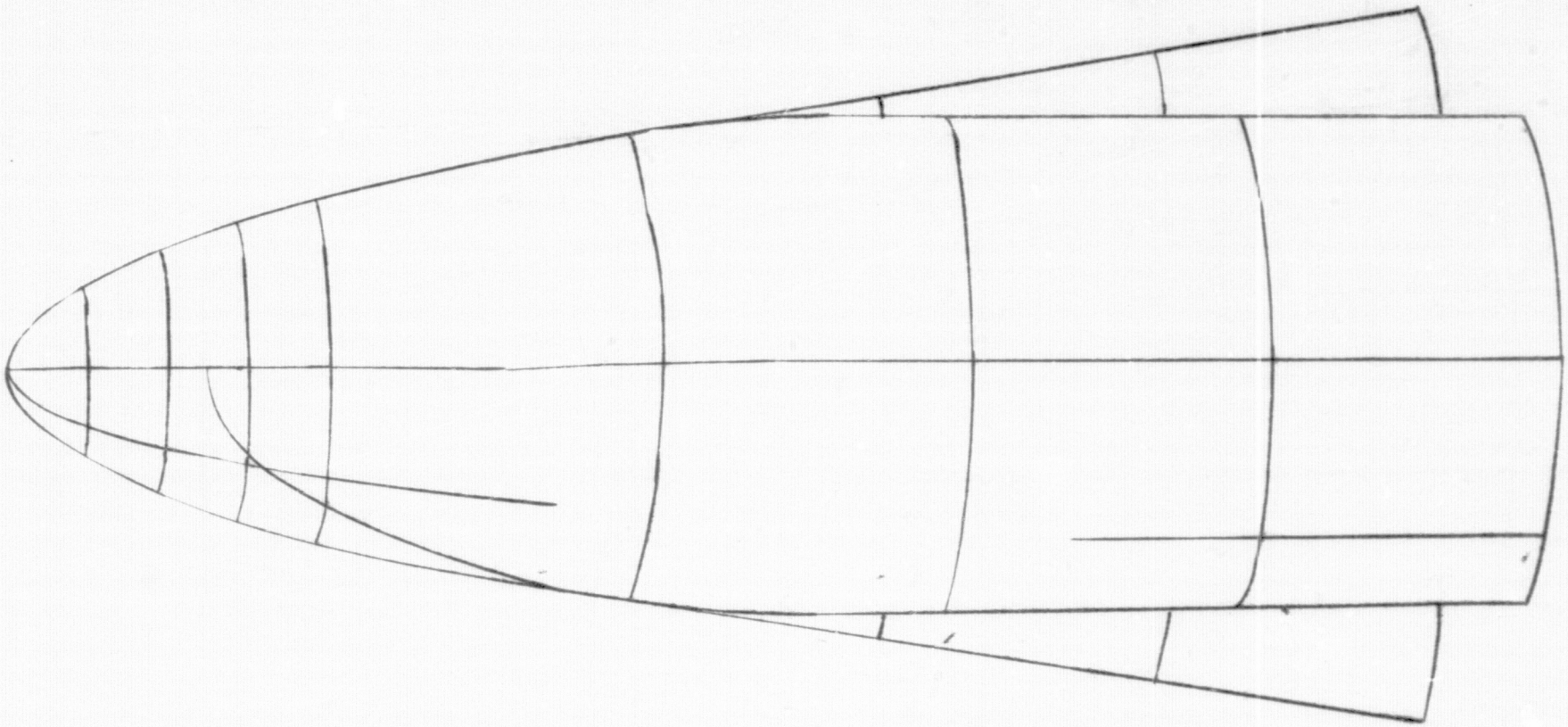
OH-50A



8424 $\alpha = 25°$

3536 $\psi = -1°$

(2)



8424 $\alpha = 30°$
3523 $\psi = 0°$

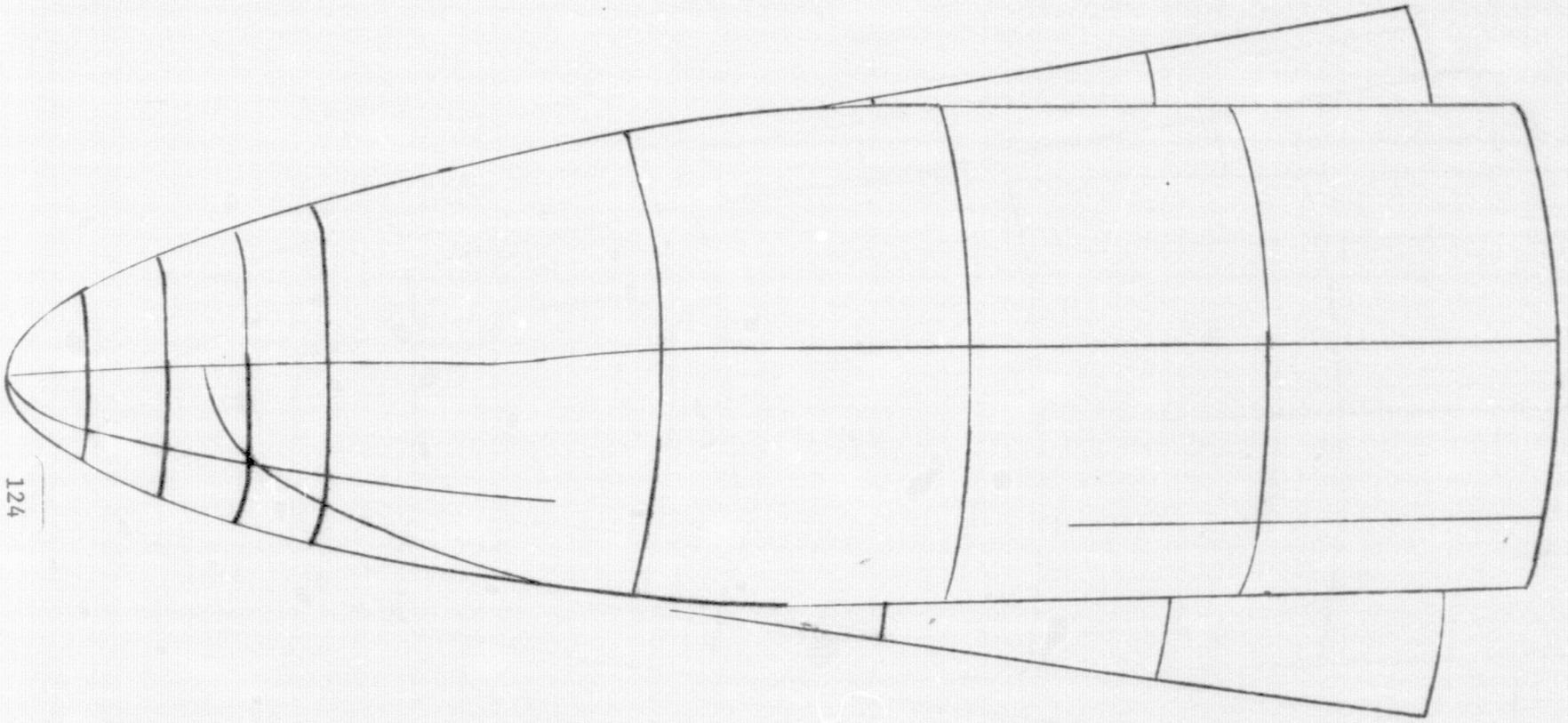
(2)

OH-50A

8424 $\alpha = 30°$

3543 $\psi = +1°$

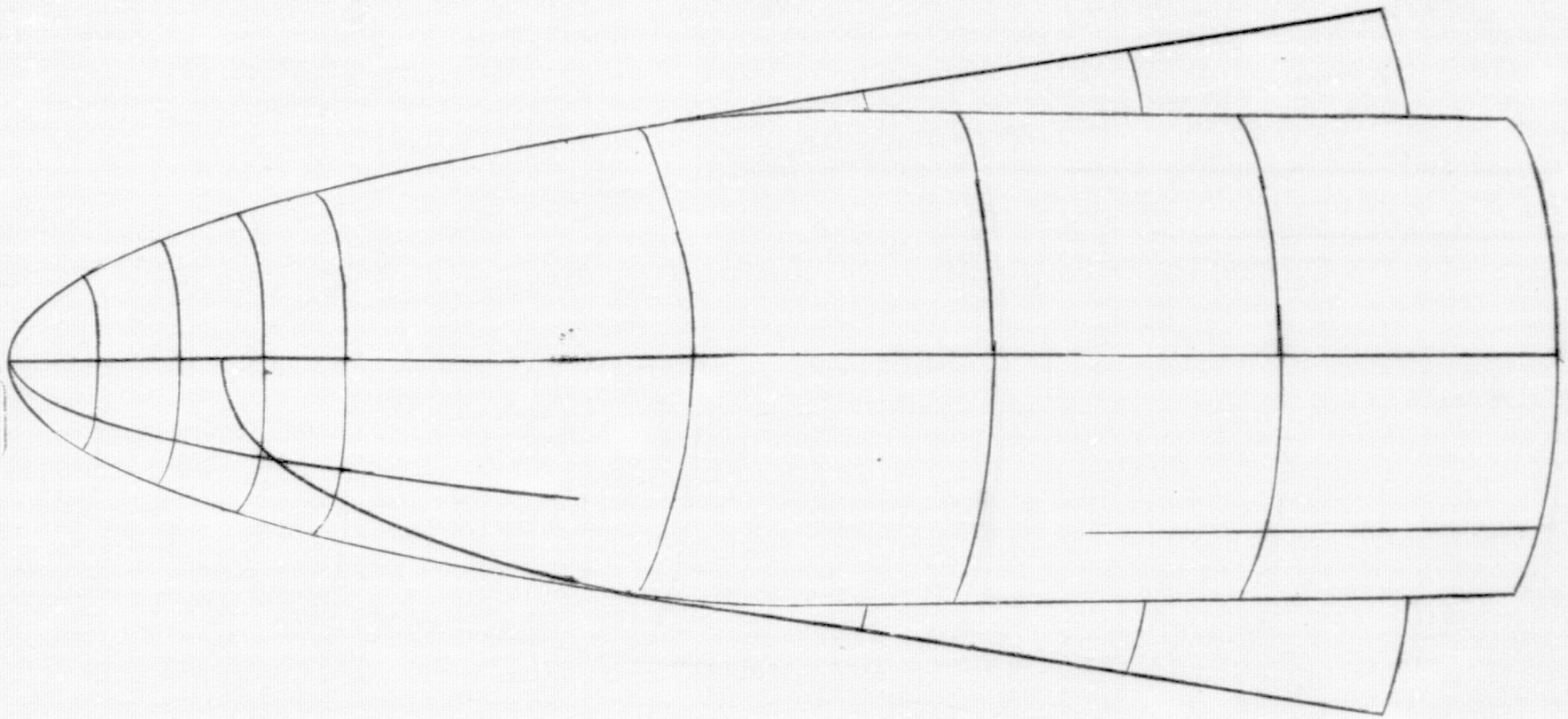
(2)



8424 $\alpha = 30°$

3940 $\psi = -1°$

(2)

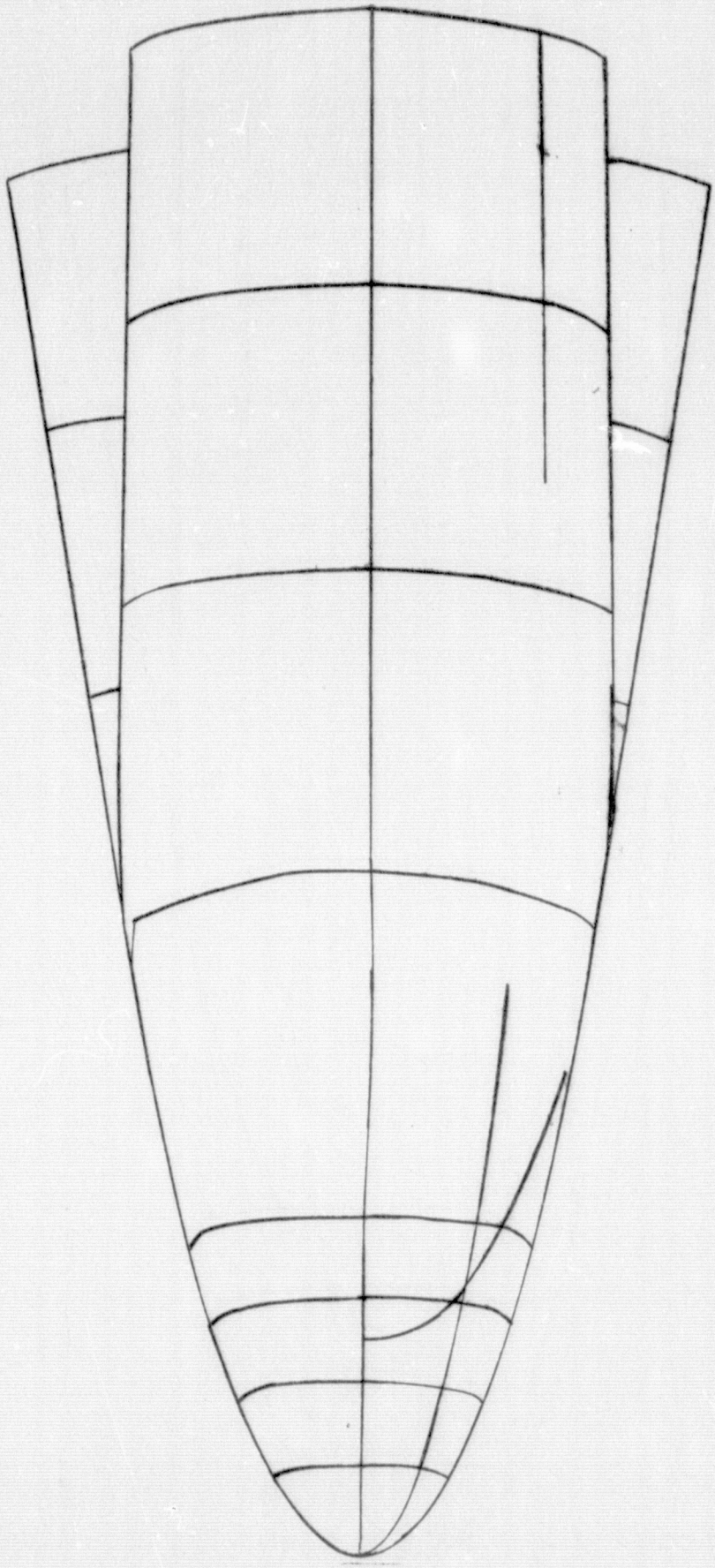


125

8424 $\alpha = 35°$

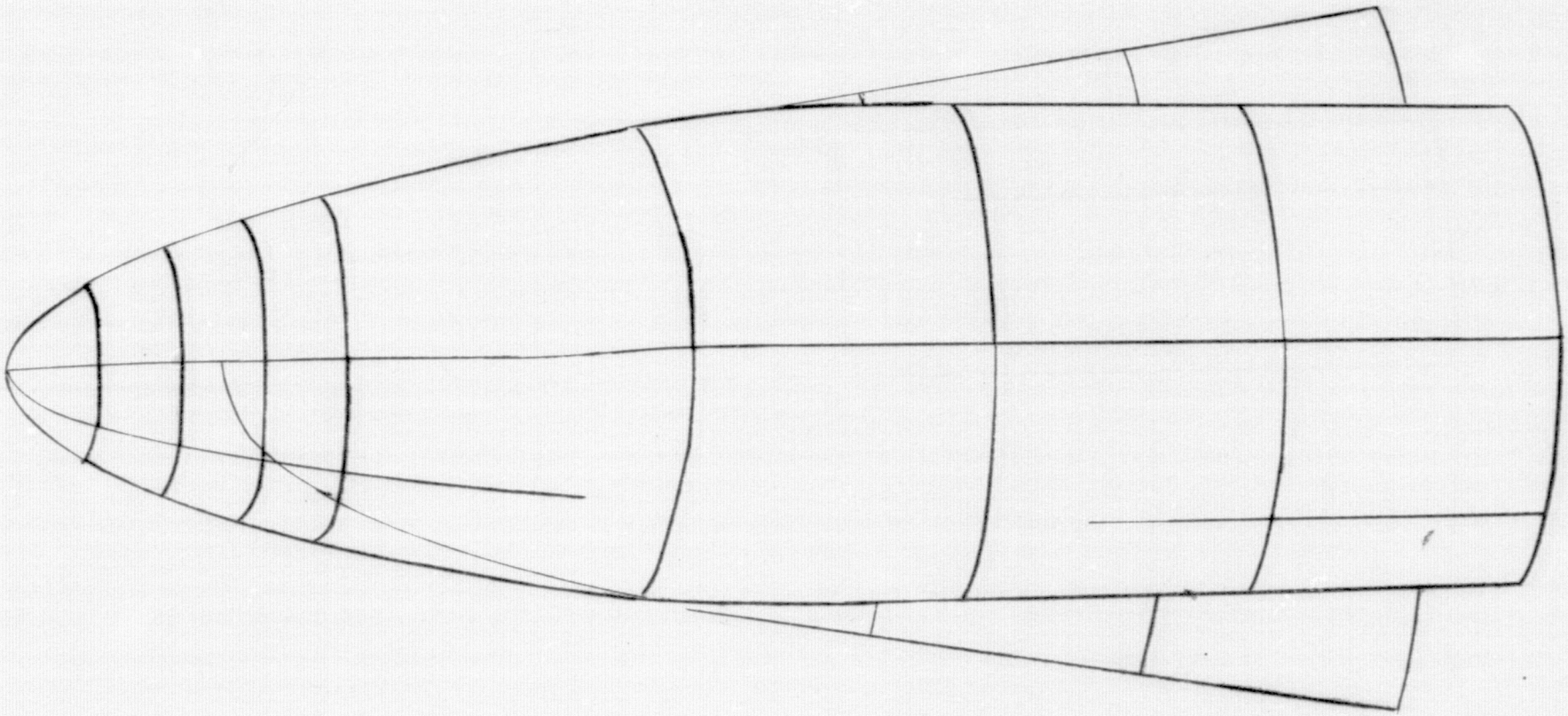
3920 $\psi = 0°$

(2)



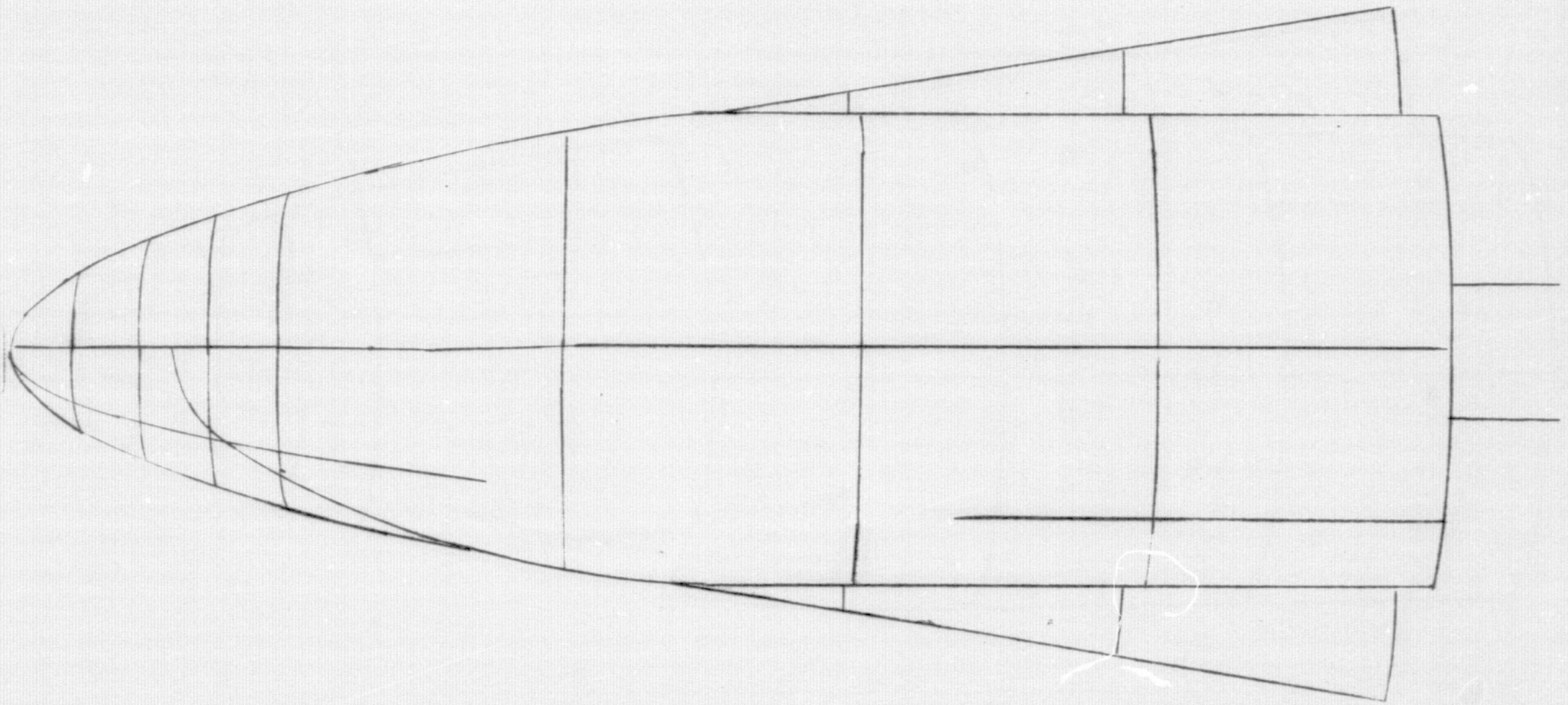
8424 $\alpha = 35°$ (2)
3555 $\psi = +1°$

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ORIGINAL PAGE IS POOR



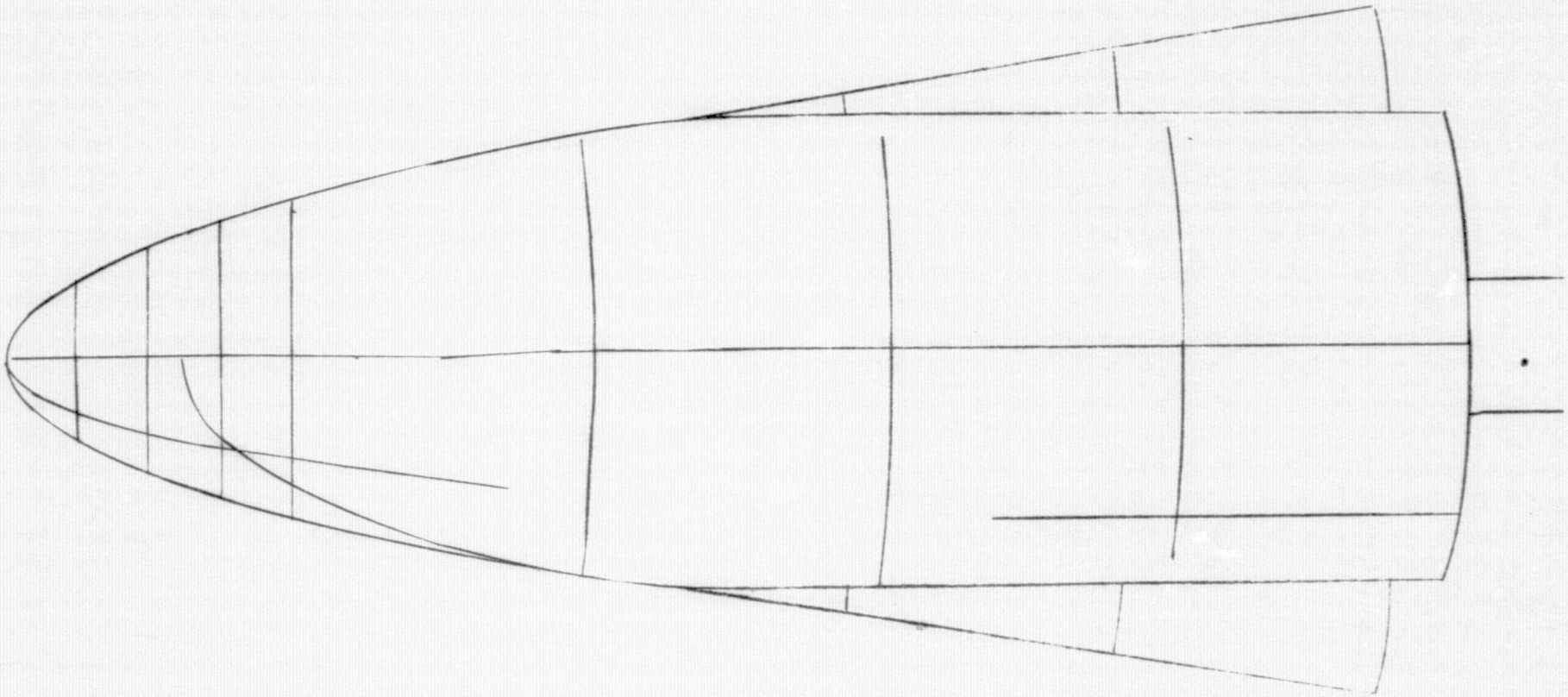
8424 $\alpha = 35°$ (2)

3992 $\psi = -1°$



128

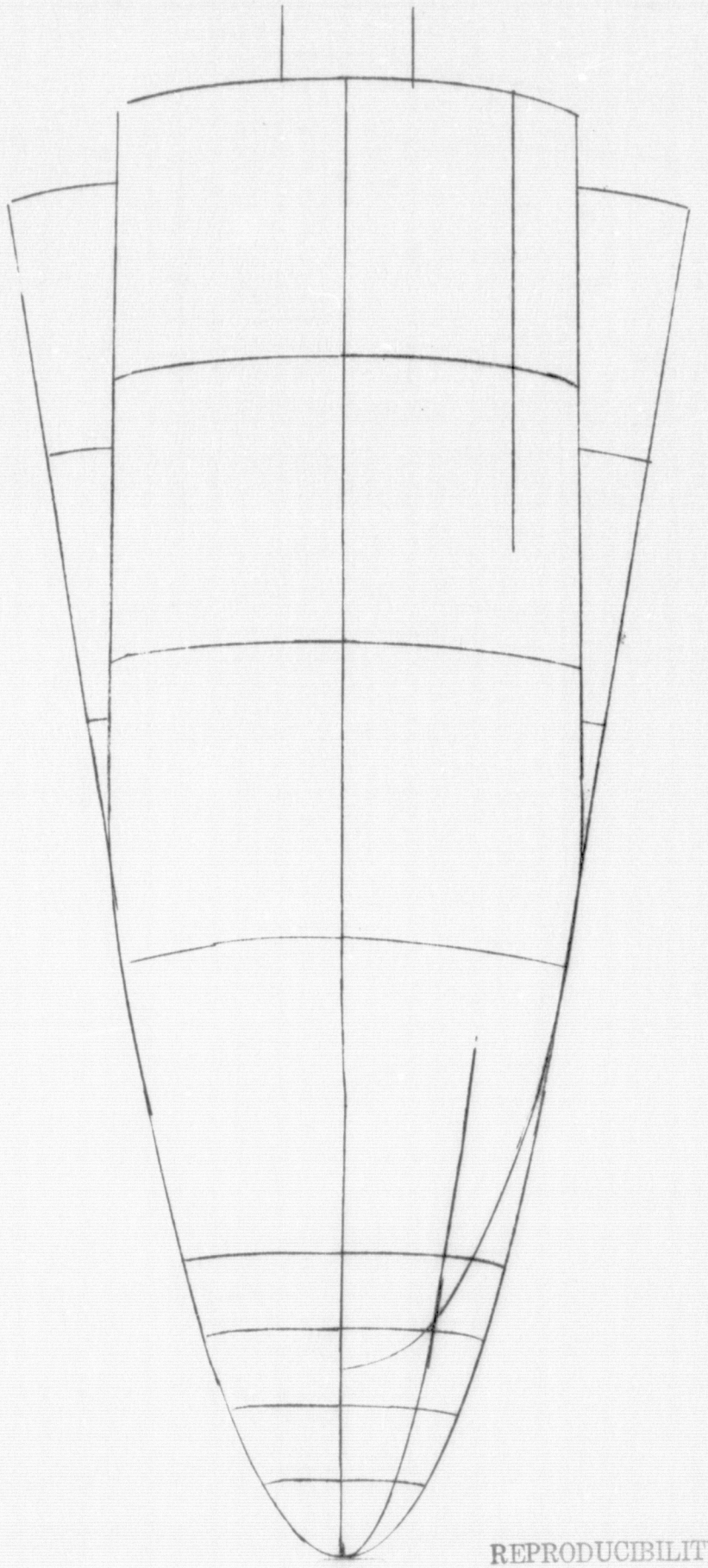
(3) 7270
FRAME 5242
α = 20
ψ = 0



129

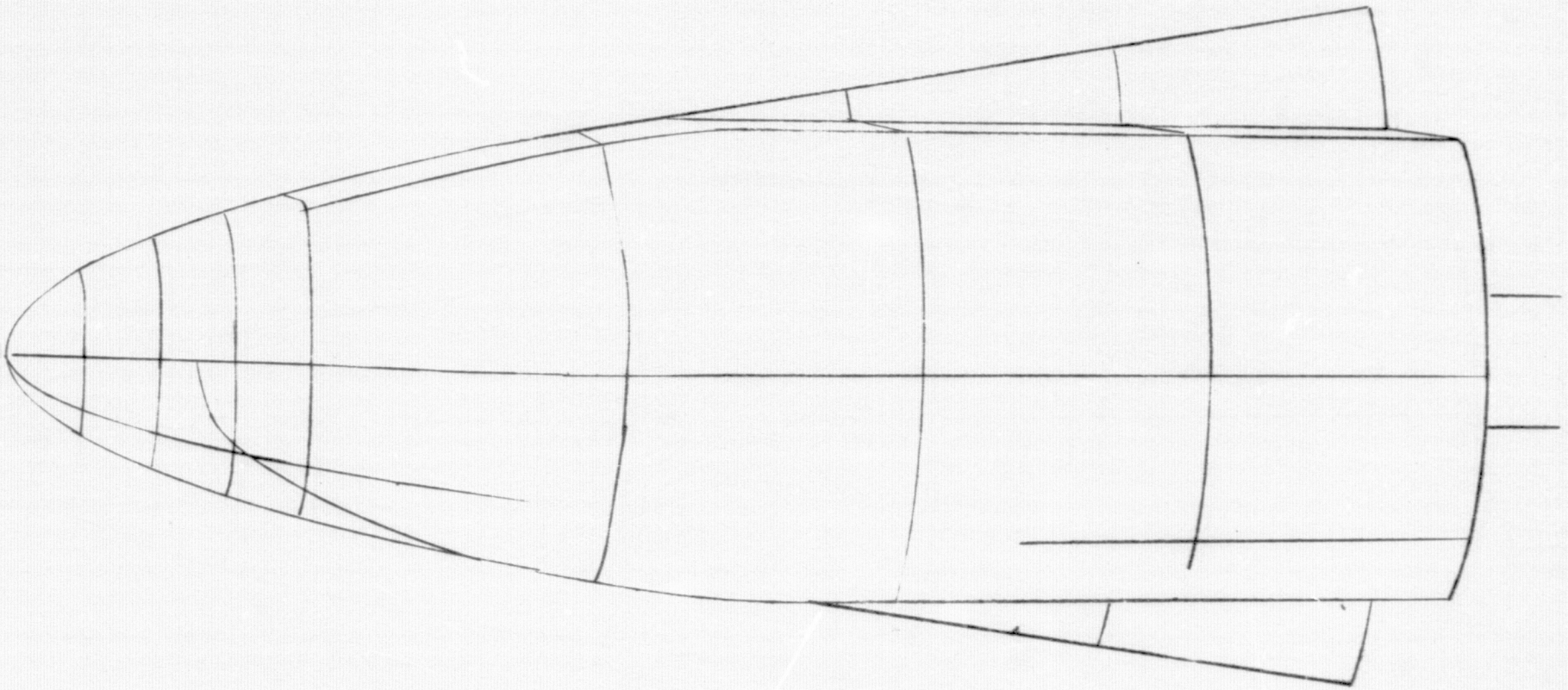
(3)

7270
Frame 5239
$\alpha = 25$
4.0



(3) 7270 Frame 5236 α = 30 ψ = 0

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



(3)

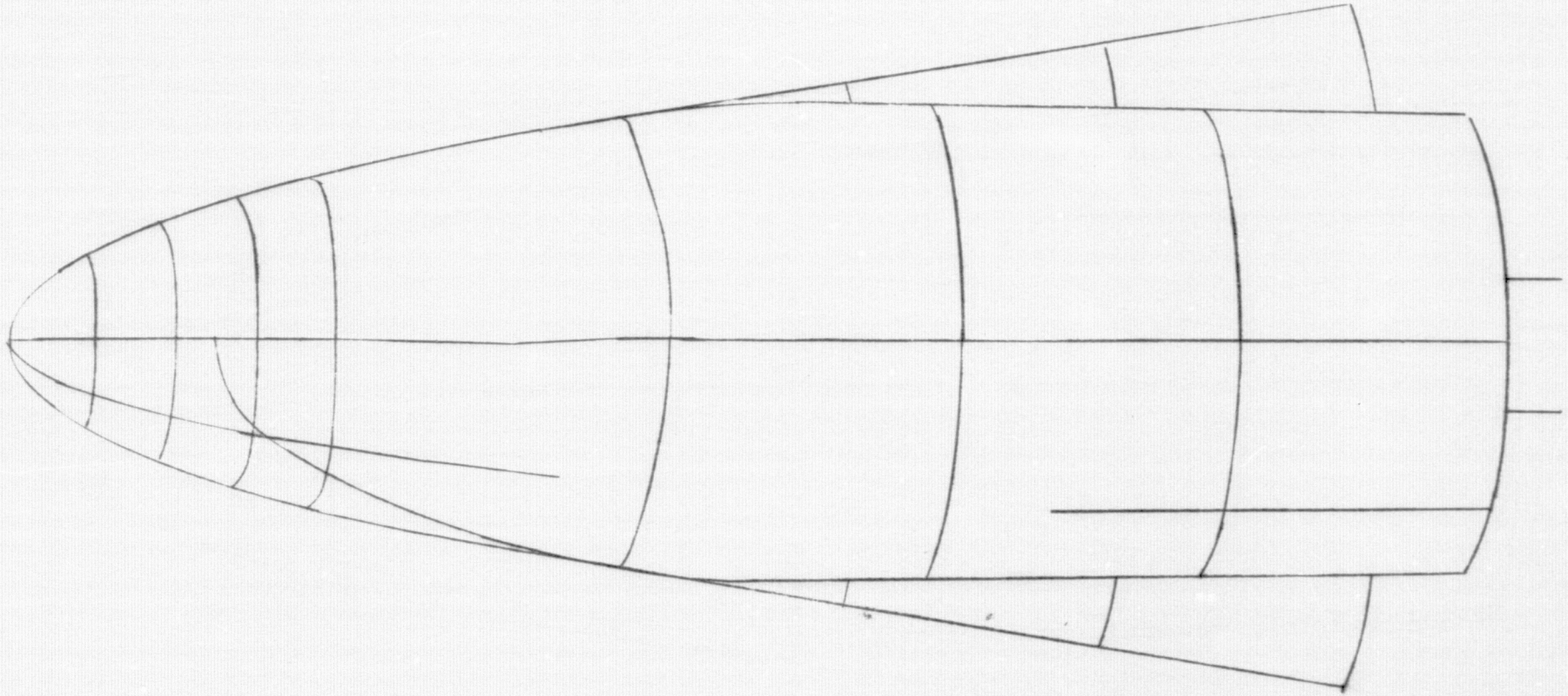
7270

FRAME 5257

$\alpha = 30$

$\psi_a = 72$

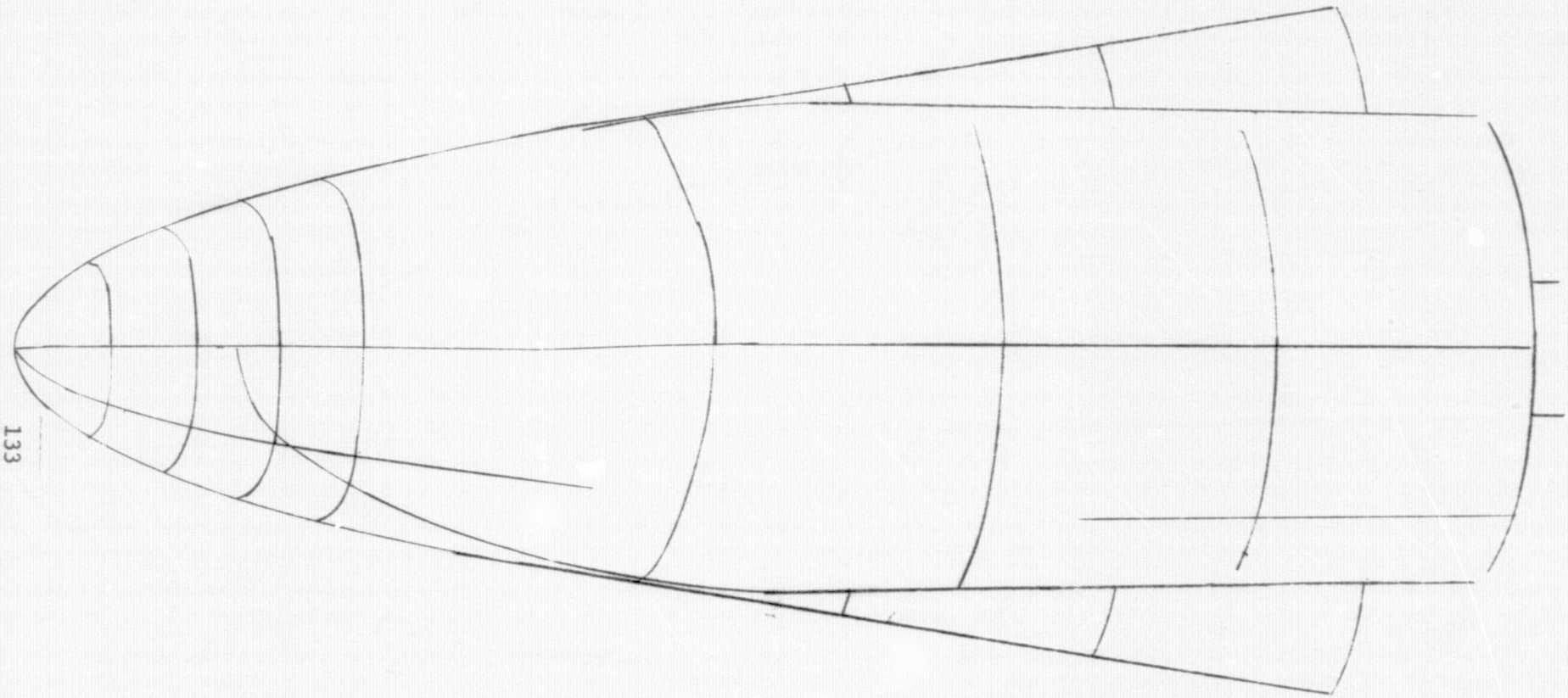
OH-58A



(3) 7270
FRAME 5233
$\phi = 35$
$\psi = 0$

3

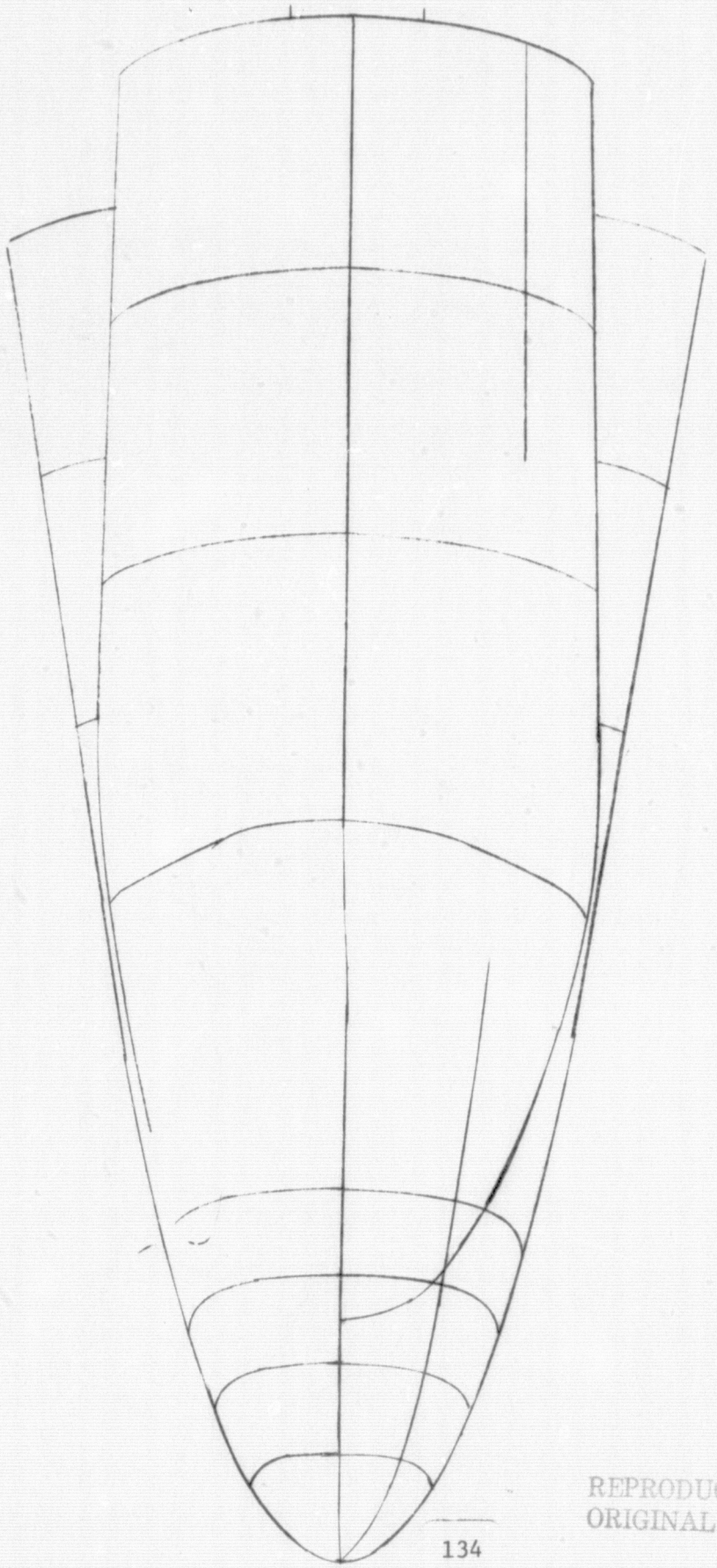
OH-501



133

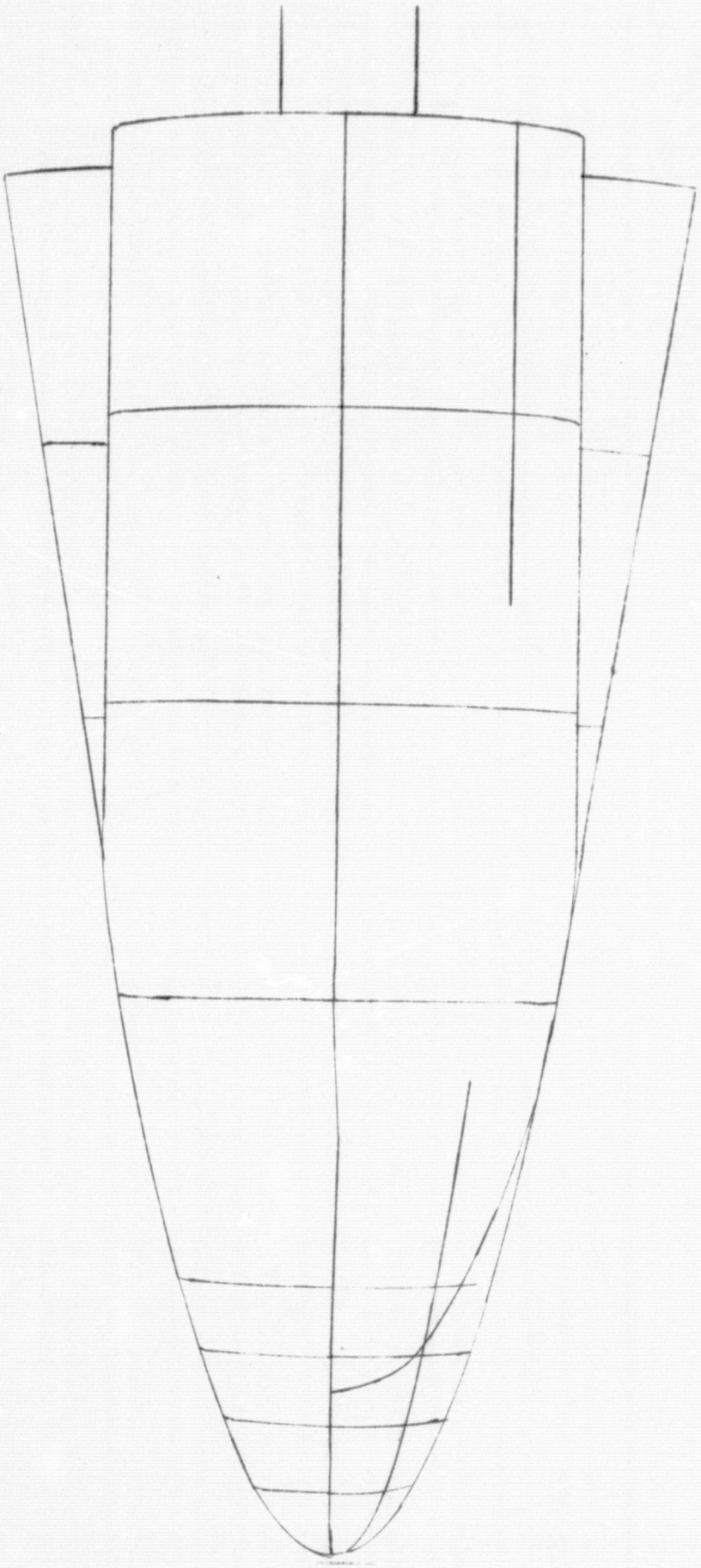
(3)

7270
FRAME 5230
$\alpha = 40$
$\psi = 0$

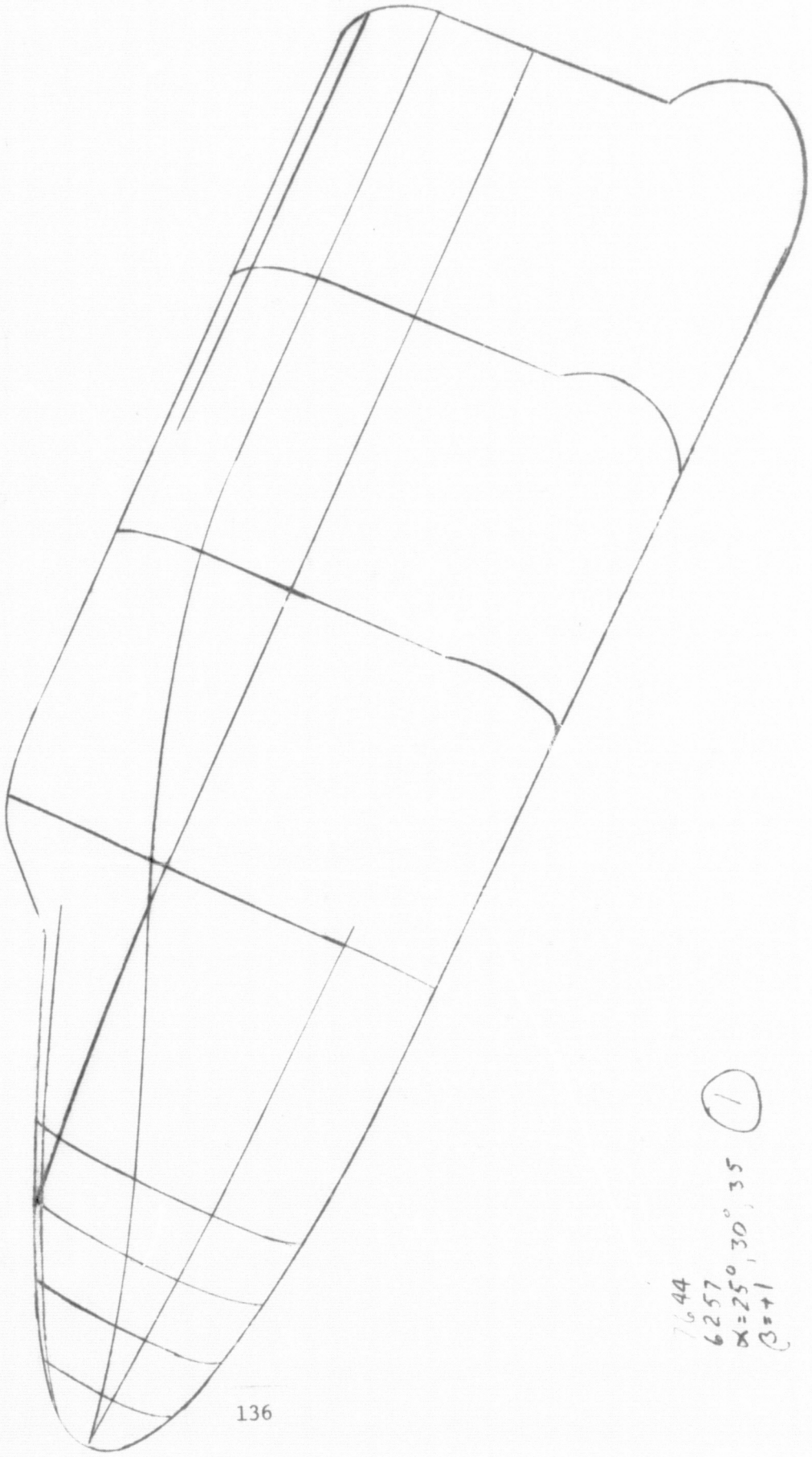


7220
(3) Frame 5227
$\alpha = 45$
$\psi = 0$

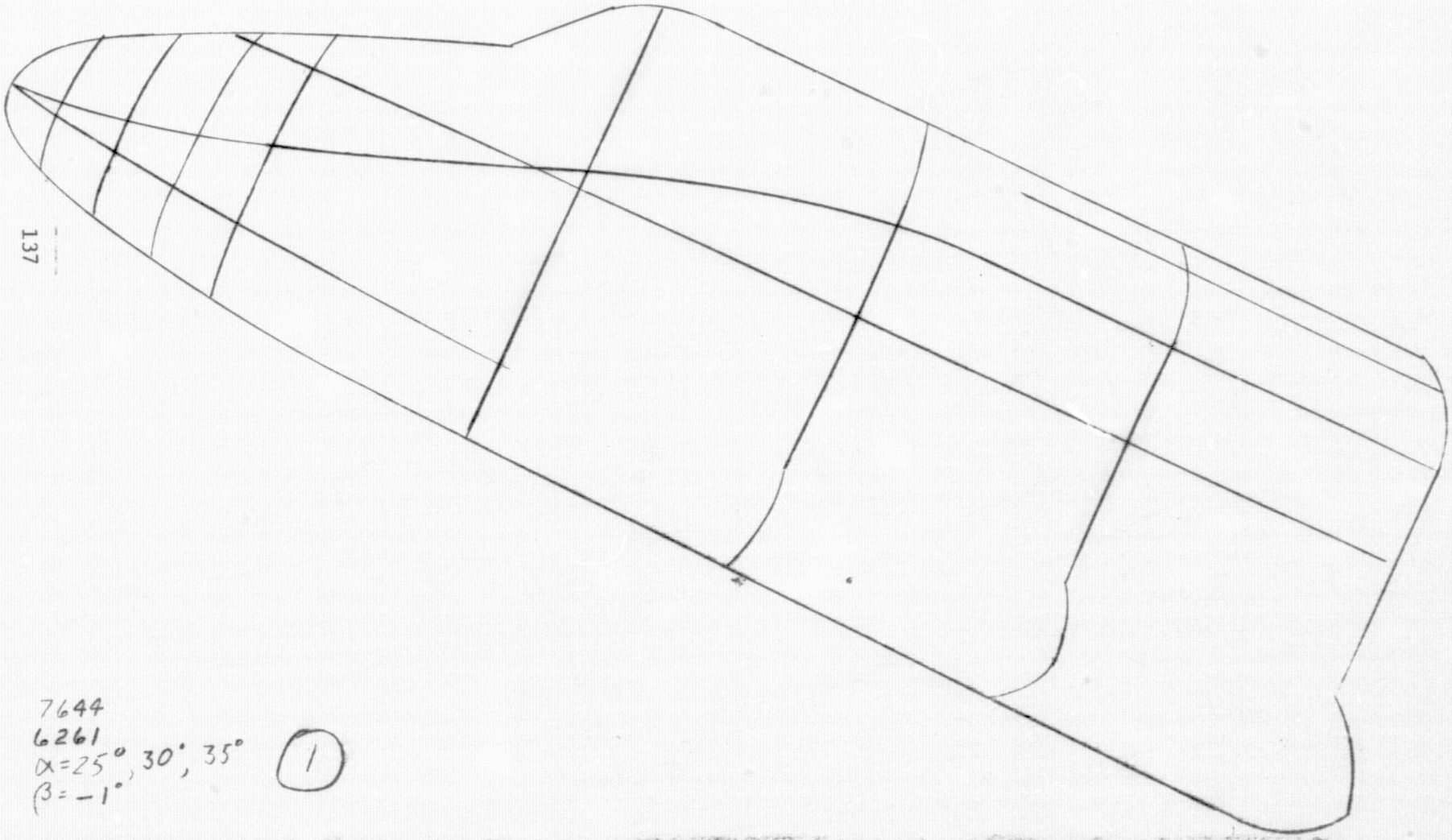
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1487
FRAME 1454
α = 20
ψ = 0



6257
$\alpha = 25°, 30°, 35°$
$\beta = +1$



137

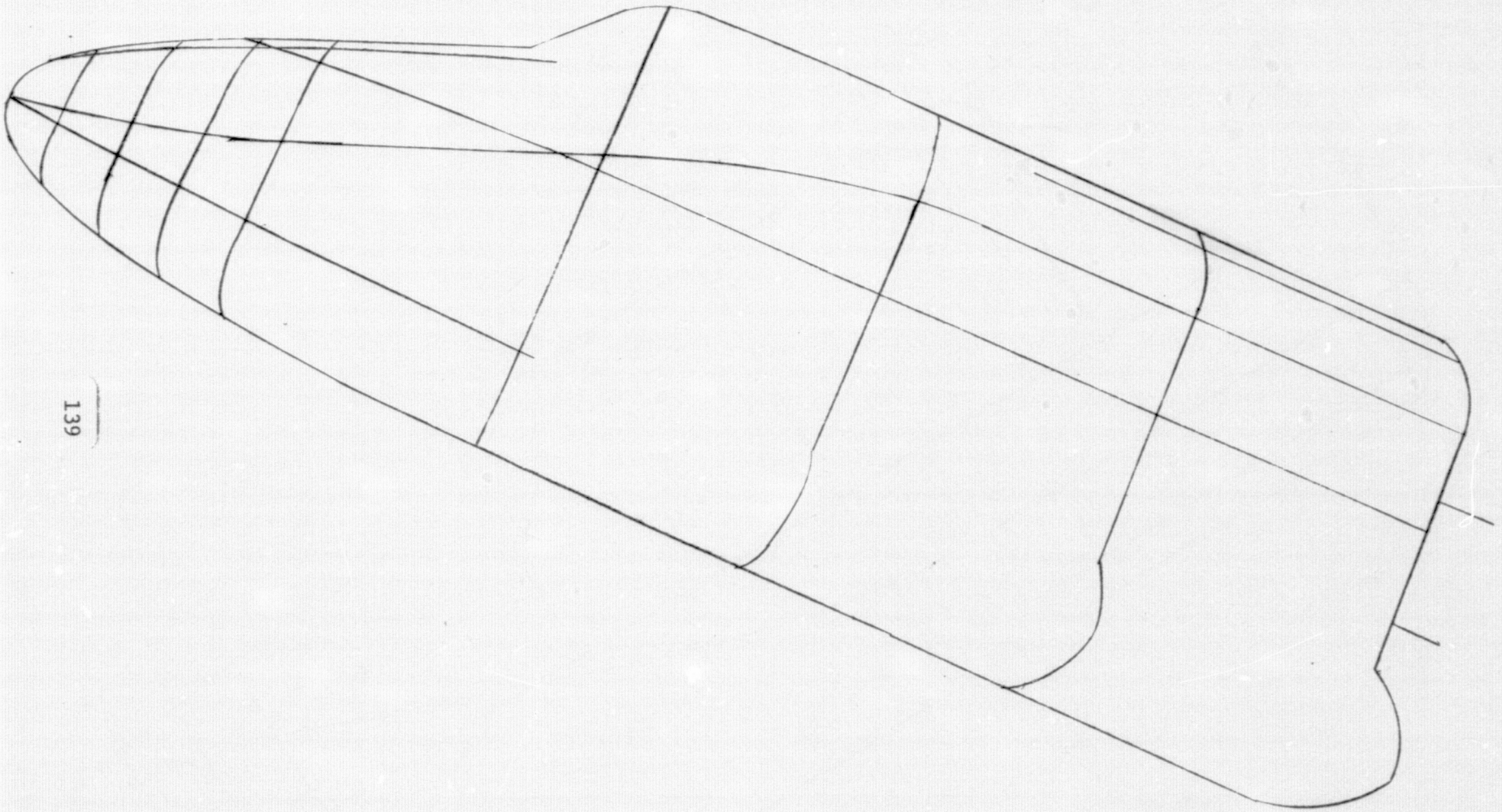
7644
6261
$\alpha = 25°, 30°, 35°$
$\beta = -1°$

(1)

8366
FRAME 8142 , 8148 , 8160
α: 25 , 30 , 35
ψ = +1

(2)

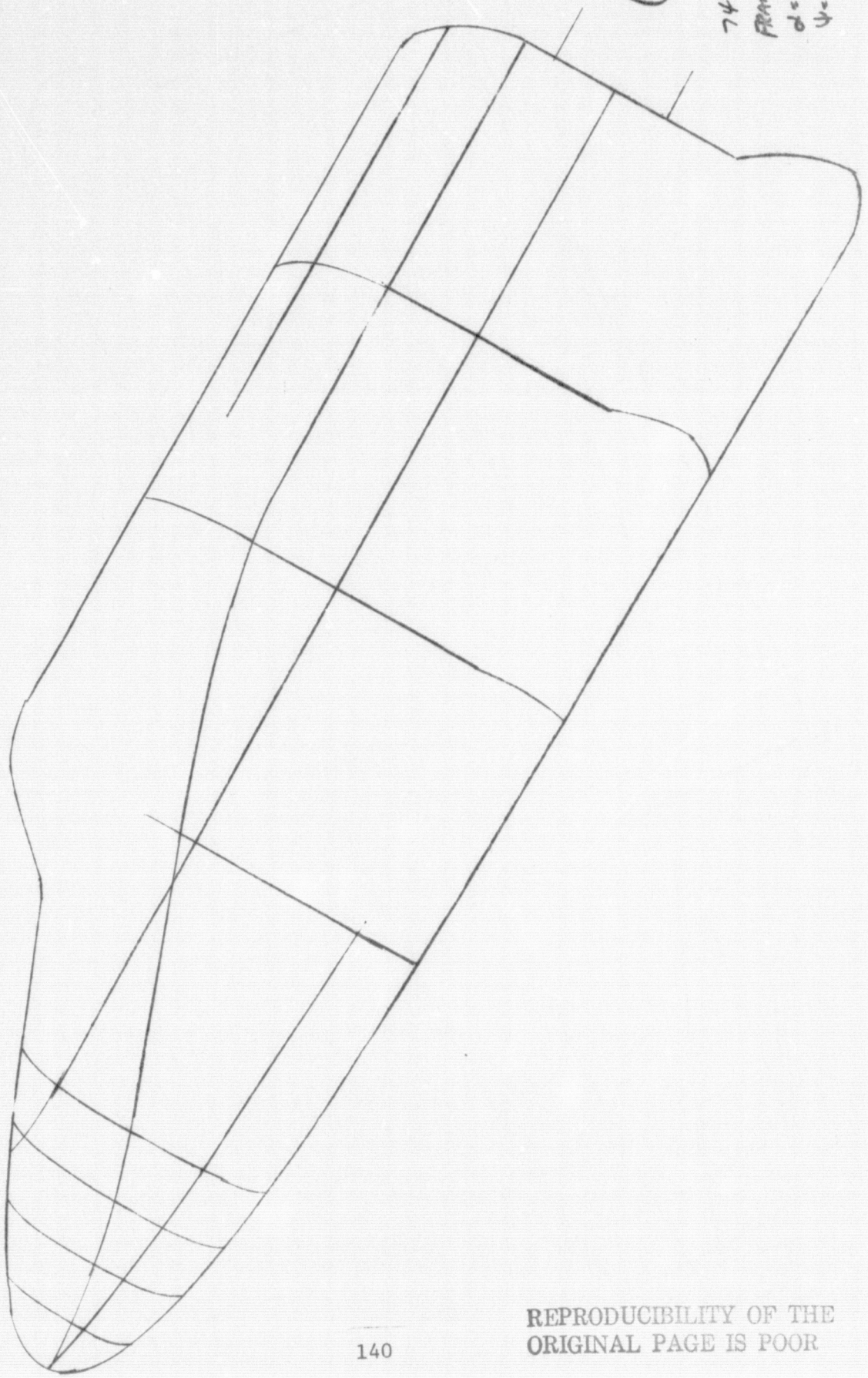
2



139

8366
FRAME 8139, 8145, 8157
α: 25, 30, 35
ψ: -1

(2)



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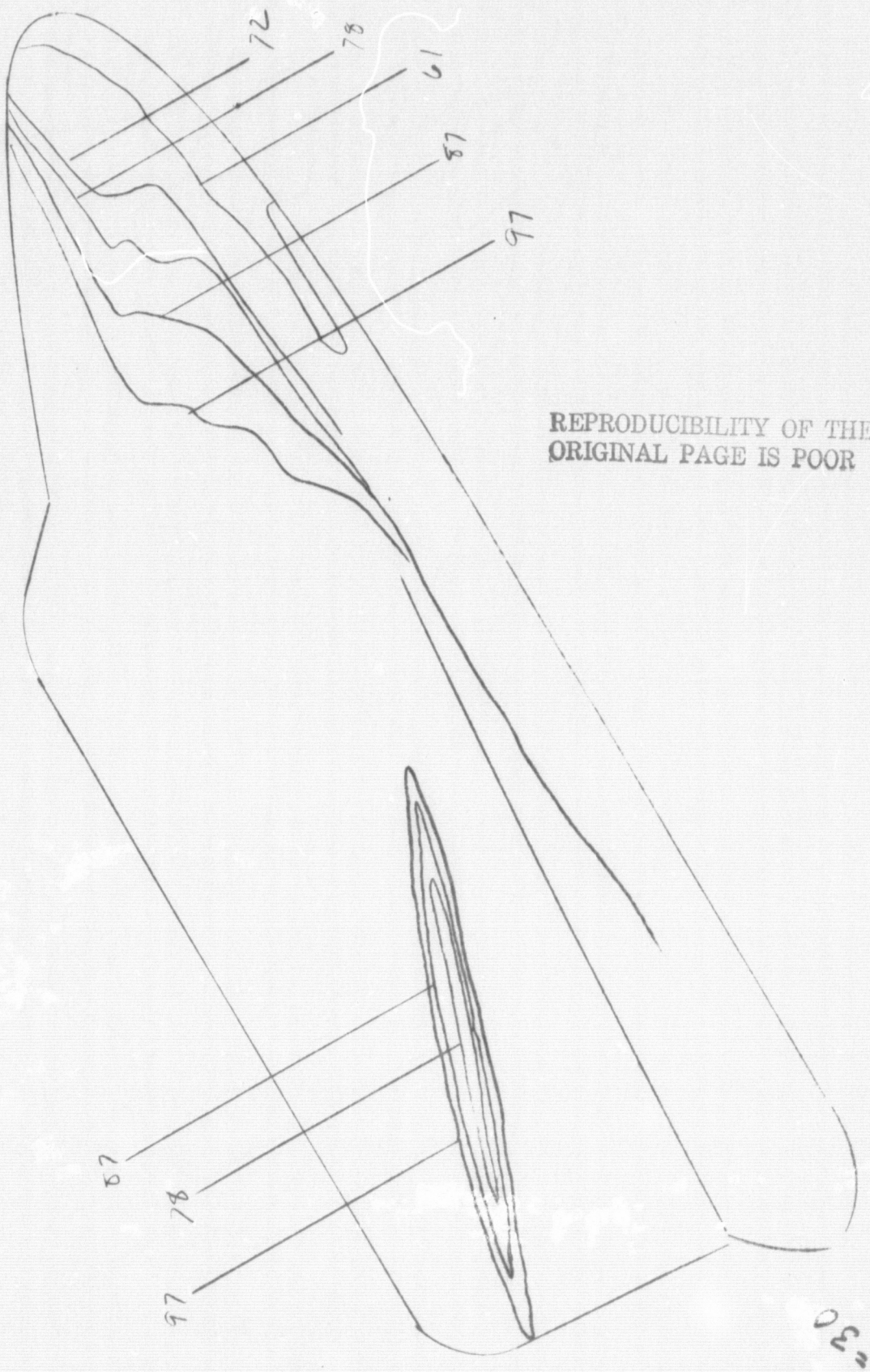
APPENDIX B

ISOTHERM CONTOURS AND TABULATED DATA

Note: Data are presented in order of increasing group number.

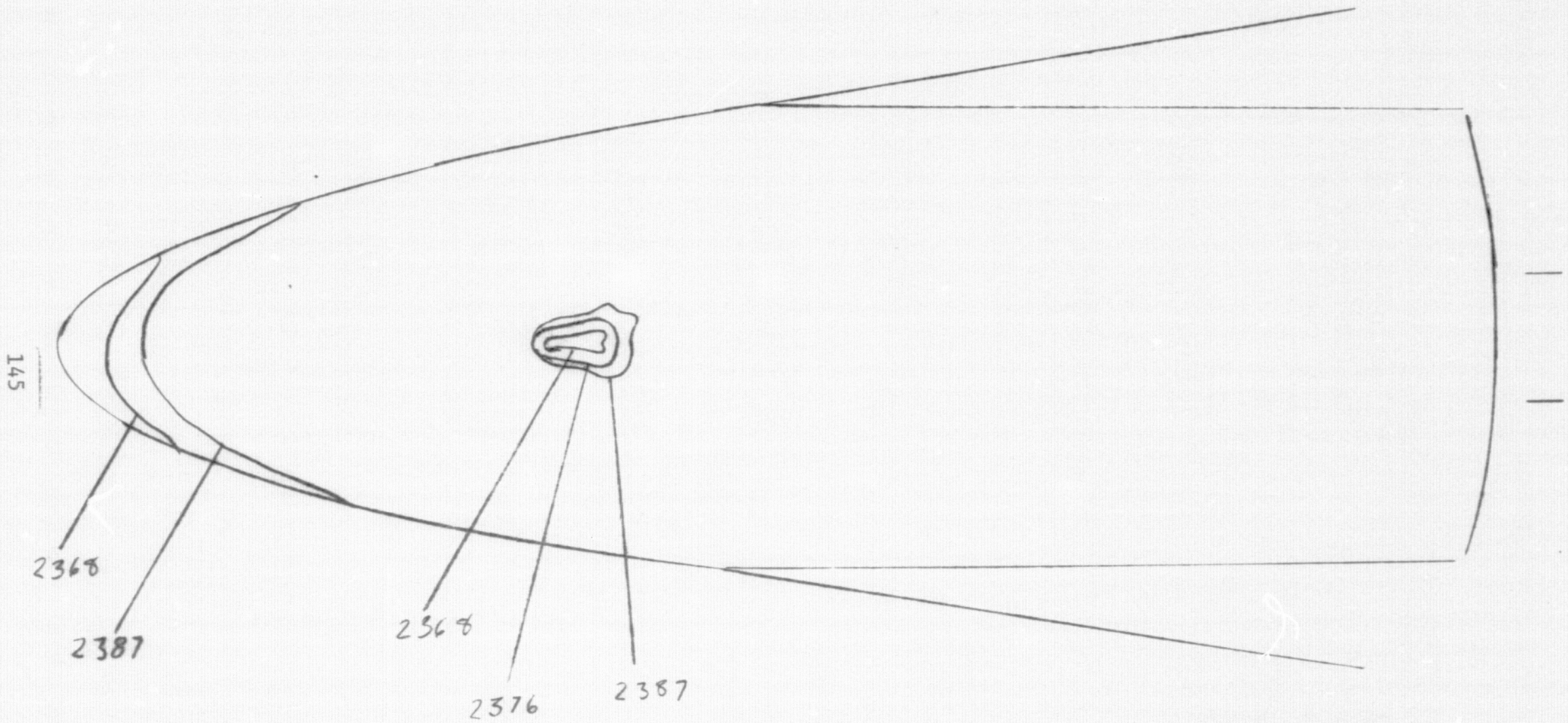
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7396
GRP1



7514
GRP 1 $\alpha = 30$

3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
1	1	7.90	104.7	1263	30.00	0	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
93.7	.012	.598	37.7	1.042E-05	7.545E-08	5.175E 05	1.153E-02	3.725E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	78	.0486	0	0
UP SIDE(US)	7386	113	78	.0486	0	0
HOTTOM(HOT)	7514	113	78	.0486	0	0
TOP(TOP)	8436	113	78	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 5258(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
US 58(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 2358(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 6758(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 5259(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
US 59(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 2359(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 6759(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME = 1.80									
TOP 5260(113)	2.18	1.17	2.000E-03	.1735	2.443E-03	.2120	2.747E-03	.2383	6.412E-03
US 60(113)	2.18	1.17	2.000E-03	.1735	2.443E-03	.2120	2.747E-03	.2383	6.412E-03
HOT 2360(113)	2.18	1.17	2.000E-03	.1735	2.443E-03	.2120	2.747E-03	.2383	6.412E-03
NOS 6760(113)	2.18	1.17	2.000E-03	.1735	2.443E-03	.2120	2.747E-03	.2383	6.412E-03
HOT 2361(113)	3.25	2.24	1.442E-03	.1251	1.762E-03	.1528	1.981E-03	.1718	4.619E-03
TOP 5261(113)	3.28	2.27	1.434E-03	.1244	1.752E-03	.1519	1.970E-03	.1708	4.593E-03
US 61(113)	3.28	2.27	1.434E-03	.1244	1.752E-03	.1519	1.970E-03	.1708	4.593E-03
NOS 6761(113)	3.28	2.27	1.434E-03	.1244	1.752E-03	.1519	1.970E-03	.1708	4.593E-03
TOP 5262(113)	4.35	3.34	1.181E-03	.1024	1.443E-03	.1251	1.622E-03	.1407	3.783E-03
US 62(113)	4.35	3.34	1.181E-03	.1024	1.443E-03	.1251	1.622E-03	.1407	3.783E-03
HOT 2362(113)	4.36	3.34	1.181E-03	.1024	1.443E-03	.1251	1.622E-03	.1407	3.783E-03
NOS 6762(113)	4.36	3.34	1.181E-03	.1024	1.443E-03	.1251	1.622E-03	.1407	3.783E-03
TOP 5263(113)	5.46	4.44	1.024E-03	.0888	1.251E-03	.1085	1.407E-03	.1220	3.281E-03
US 63(113)	5.46	4.44	1.024E-03	.0888	1.251E-03	.1085	1.407E-03	.1220	3.281E-03
HOT 2363(113)	5.46	4.44	1.024E-03	.0888	1.251E-03	.1085	1.407E-03	.1220	3.281E-03
NOS 6763(113)	5.46	4.44	1.024E-03	.0888	1.251E-03	.1085	1.407E-03	.1220	3.281E-03
HOT 2364(113)	6.53	5.52	9.190E-04	.0797	1.123E-03	.0974	1.262E-03	.1095	2.944E-03

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NASA-RI 0H50 AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
1	1	7.90	104.8	1264	30.00	0	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.012	.509	3748	1.043E-05	7.546E-08	5.179E 05	1.153E-02	3.723E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	78	.0486	4.825E-02	4.4432E-02
UP SIDE(US)	7386	113	78	.0486	4.825E-02	4.4432E-02
BOTTOM(BOT)	7514	113	78	.0486	4.825E-02	4.4432E-02
TOP(TOP)	8436	113	78	.0486	4.825E-02	4.4432E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5264(113)	6.56	5.55	9.169E-04	.0795	1.120E-03	.0971	1.259E-03	.1092	2.937E-03
US 64(113)	6.56	5.55	9.169E-04	.0795	1.120E-03	.0971	1.259E-03	.1092	2.937E-03
NOS 6764(113)	6.56	5.55	9.169E-04	.0795	1.120E-03	.0971	1.259E-03	.1092	2.937E-03
TOP 5265(113)	7.63	6.62	8.391E-04	.0727	1.025E-03	.0888	1.153E-03	.0999	2.683E-03
US 65(113)	7.63	6.62	8.391E-04	.0727	1.025E-03	.0888	1.153E-03	.0999	2.683E-03
HOT 2365(113)	7.63	6.62	8.391E-04	.0727	1.025E-03	.0888	1.153E-03	.0999	2.683E-03
NOS 6765(113)	7.63	6.62	8.391E-04	.0727	1.025E-03	.0888	1.153E-03	.0999	2.683E-03
TOP 5266(113)	8.74	7.72	7.770E-04	.0673	9.491E-04	.0822	1.067E-03	.0925	2.484E-03
US 66(113)	8.74	7.72	7.770E-04	.0673	9.491E-04	.0822	1.067E-03	.0925	2.484E-03
HOT 2366(113)	8.74	7.72	7.770E-04	.0673	9.491E-04	.0822	1.067E-03	.0925	2.484E-03
NOS 6766(113)	8.74	7.72	7.770E-04	.0673	9.491E-04	.0822	1.067E-03	.0925	2.484E-03
TOP 5267(113)	9.81	8.80	7.279E-04	.0631	8.892E-04	.0770	9.998E-04	.0866	2.327E-03
US 67(113)	9.81	8.80	7.279E-04	.0631	8.892E-04	.0770	9.998E-04	.0866	2.327E-03
HOT 2367(113)	9.81	8.80	7.279E-04	.0631	8.892E-04	.0770	9.998E-04	.0866	2.327E-03
NOS 6767(113)	9.81	8.80	7.279E-04	.0631	8.892E-04	.0770	9.998E-04	.0866	2.327E-03
TOP 5268(113)	10.91	9.90	6.863E-04	.0595	8.383E-04	.0726	9.426E-04	.0817	2.194E-03
US 68(113)	10.91	9.90	6.863E-04	.0595	8.383E-04	.0726	9.426E-04	.0817	2.194E-03
HOT 2368(113)	10.91	9.90	6.863E-04	.0595	8.383E-04	.0726	9.426E-04	.0817	2.194E-03
NOS 6768(113)	10.91	9.90	6.863E-04	.0595	8.383E-04	.0726	9.426E-04	.0817	2.194E-03
TOP 5269(113)	11.99	10.98	6.518E-04	.0565	7.961E-04	.0690	8.952E-04	.0776	2.084E-03
US 69(113)	12.01	11.00	6.510E-04	.0564	7.952E-04	.0689	8.941E-04	.0774	2.079E-03
HOT 2369(113)	12.01	11.00	6.510E-04	.0564	7.952E-04	.0689	8.941E-04	.0774	2.079E-03
NOS 6769(113)	12.01	11.00	6.510E-04	.0564	7.952E-04	.0689	8.941E-04	.0774	2.079E-03
TOP 5270(113)	13.09	12.08	6.213E-04	.0538	7.590E-04	.0657	8.534E-04	.0739	1.985E-03
US 70(113)	13.09	12.08	6.213E-04	.0538	7.590E-04	.0657	8.534E-04	.0739	1.985E-03
HOT 2370(113)	13.09	12.08	6.213E-04	.0538	7.590E-04	.0657	8.534E-04	.0739	1.985E-03

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
1	1	7.90	105.1	1264	30.00	0	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.012	.510	3748	1.046E-05	7.546E-08	5.194E 05	1.155E-02	3.718E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOF SIDE(NOS)	7610	113	78	.0486	4.825E-02	4.4432E-02
UP SIDE(OS)	7386	113	78	.0486	4.825E-02	4.4432E-02
HOTICM(BOT)	7514	113	78	.0486	4.825E-02	4.4432E-02
TOP(TOP)	8436	113	78	.0486	4.825E-02	4.4432E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
NOS 6770(113)	13.12	12.10	6.207E-04	.0537	7.582E-04	.0657	8.525E-04	.0738	1.983E-03
TOP 5271(113)	14.19	13.18	5.948E-04	.0515	7.266E-04	.0629	8.170E-04	.0708	1.902E-03
OS 71(113)	14.19	13.18	5.948E-04	.0515	7.266E-04	.0629	8.170E-04	.0708	1.902E-03
HOT 2371(113)	14.19	13.18	5.948E-04	.0515	7.266E-04	.0629	8.170E-04	.0708	1.902E-03
NOS 6771(113)	14.19	13.18	5.948E-04	.0515	7.266E-04	.0629	8.170E-04	.0708	1.902E-03
TOP 5272(113)	15.29	14.28	5.714E-04	.0495	6.980E-04	.0604	7.848E-04	.0680	1.825E-03
OS 72(113)	15.29	14.28	5.714E-04	.0495	6.980E-04	.0604	7.848E-04	.0680	1.825E-03
HOT 2372(113)	15.29	14.28	5.714E-04	.0495	6.980E-04	.0604	7.848E-04	.0680	1.825E-03
NOS 6772(113)	15.29	14.28	5.714E-04	.0495	6.980E-04	.0604	7.848E-04	.0680	1.825E-03
OS 73(113)	16.37	15.36	5.510E-04	.0477	6.731E-04	.0583	7.568E-04	.0655	1.758E-03
HOT 2373(113)	16.37	15.36	5.510E-04	.0477	6.731E-04	.0583	7.568E-04	.0655	1.758E-03
TOP 5273(113)	16.39	15.38	5.506E-04	.0477	6.725E-04	.0582	7.562E-04	.0655	1.757E-03
NOS 6773(113)	16.39	15.38	5.506E-04	.0477	6.725E-04	.0582	7.562E-04	.0655	1.757E-03
TOP 5274(113)	17.47	16.46	5.323E-04	.0460	6.502E-04	.0562	7.311E-04	.0632	1.697E-03
OS 74(113)	17.47	16.46	5.323E-04	.0460	6.502E-04	.0562	7.311E-04	.0632	1.697E-03
HOT 2374(113)	17.47	16.46	5.323E-04	.0460	6.502E-04	.0562	7.311E-04	.0632	1.697E-03
NOS 6774(113)	17.47	16.46	5.323E-04	.0460	6.502E-04	.0562	7.311E-04	.0632	1.697E-03
TOP 5275(113)	18.57	17.56	5.153E-04	.0446	6.295E-04	.0545	7.078E-04	.0613	1.644E-03
OS 75(113)	18.57	17.56	5.153E-04	.0446	6.295E-04	.0545	7.078E-04	.0613	1.644E-03
HOT 2375(113)	18.57	17.56	5.153E-04	.0446	6.295E-04	.0545	7.078E-04	.0613	1.644E-03
NOS 6775(113)	18.57	17.56	5.153E-04	.0446	6.295E-04	.0545	7.078E-04	.0613	1.644E-03
TOP 5276(113)	19.65	18.64	5.002E-04	.0433	6.110E-04	.0529	6.870E-04	.0594	1.595E-03
HOT 2376(113)	19.65	18.64	5.002E-04	.0433	6.110E-04	.0529	6.870E-04	.0594	1.595E-03
OS 76(113)	19.67	18.66	4.999E-04	.0433	6.106E-04	.0528	6.866E-04	.0594	1.595E-03
NOS 6776(113)	19.67	18.66	4.999E-04	.0433	6.106E-04	.0528	6.866E-04	.0594	1.595E-03

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NASA-RI OHSO

VA526

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
1	1	7.90	105.2	1264	30.00	0	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.012	.511	3748	1.047E-05	7.546E-08	5.199E 05	1.155E-02	3.716E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	78	.0486	4.825E-02	4.4432E-02
UP SIDE(US)	7386	113	78	.0486	4.825E-02	4.4432E-02
BOTTOM(BOT)	7514	113	78	.0486	4.825E-02	4.4432E-02
TOP(TOP)	8436	113	78	.0486	4.825E-02	4.4432E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5277(113)	20.75	19.74	4.861E-04	.0420	5.937E-04	.0514	6.676E-04	.0578	1.550E-03
US 77(113)	20.75	19.74	4.861E-04	.0420	5.937E-04	.0514	6.676E-04	.0578	1.550E-03
HOT 2377(113)	20.75	19.74	4.861E-04	.0420	5.937E-04	.0514	6.676E-04	.0578	1.550E-03
NOS 6777(113)	20.75	19.74	4.861E-04	.0420	5.937E-04	.0514	6.676E-04	.0578	1.550E-03
TOP 5278(113)	21.85	20.84	4.730E-04	.0409	5.778E-04	.0500	6.497E-04	.0562	1.507E-03
US 78(113)	21.85	20.84	4.730E-04	.0409	5.778E-04	.0500	6.497E-04	.0562	1.507E-03
HOT 2378(113)	21.85	20.84	4.730E-04	.0409	5.778E-04	.0500	6.497E-04	.0562	1.507E-03
NOS 6778(113)	21.85	20.84	4.730E-04	.0409	5.778E-04	.0500	6.497E-04	.0562	1.507E-03
TOP 5279(113)	22.93	21.91	4.613E-04	.0399	5.635E-04	.0487	6.336E-04	.0548	1.471E-03
US 79(113)	22.93	21.91	4.613E-04	.0399	5.635E-04	.0487	6.336E-04	.0548	1.471E-03
HOT 2379(113)	22.93	21.91	4.613E-04	.0399	5.635E-04	.0487	6.336E-04	.0548	1.471E-03
NOS 6779(113)	22.93	21.91	4.613E-04	.0399	5.635E-04	.0487	6.336E-04	.0548	1.471E-03
TOP 5280(113)	24.03	23.02	4.501E-04	.0389	5.498E-04	.0476	6.182E-04	.0535	1.435E-03
US 80(113)	24.03	23.02	4.501E-04	.0389	5.498E-04	.0476	6.182E-04	.0535	1.435E-03
HOT 2380(113)	24.03	23.02	4.501E-04	.0389	5.498E-04	.0476	6.182E-04	.0535	1.435E-03
NOS 6780(113)	24.03	23.02	4.501E-04	.0389	5.498E-04	.0476	6.182E-04	.0535	1.435E-03
TOP 5281(113)	25.13	24.12	4.397E-04	.0380	5.371E-04	.0464	6.039E-04	.0522	1.400E-03
US 81(113)	25.13	24.12	4.397E-04	.0380	5.371E-04	.0464	6.039E-04	.0522	1.400E-03
HOT 2381(113)	25.13	24.12	4.397E-04	.0380	5.371E-04	.0464	6.039E-04	.0522	1.400E-03
NOS 6781(113)	25.13	24.12	4.397E-04	.0380	5.371E-04	.0464	6.039E-04	.0522	1.400E-03
TOP 5282(113)	26.21	25.19	4.302E-04	.0372	5.255E-04	.0455	5.909E-04	.0511	1.372E-03
US 82(113)	26.21	25.19	4.302E-04	.0372	5.255E-04	.0455	5.909E-04	.0511	1.372E-03
HOT 2382(113)	26.21	25.19	4.302E-04	.0372	5.255E-04	.0455	5.909E-04	.0511	1.372E-03
NOS 6782(113)	26.21	25.19	4.302E-04	.0372	5.255E-04	.0455	5.909E-04	.0511	1.372E-03
TOP 5283(113)	27.31	26.29	4.211E-04	.0364	5.144E-04	.0445	5.784E-04	.0500	1.342E-03
US 83(113)	27.31	26.29	4.211E-04	.0364	5.144E-04	.0445	5.784E-04	.0500	1.342E-03
HOT 2383(113)	27.31	26.29	4.211E-04	.0364	5.144E-04	.0445	5.784E-04	.0500	1.342E-03
NOS 6783(113)	27.31	26.29	4.211E-04	.0364	5.144E-04	.0445	5.784E-04	.0500	1.342E-03

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NASA-RI OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
1	1	7.90	105.3	1264	30.00	0	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.012	.511	3748	1.048E-05	7.546E-08	5.204E 05	1.156E-02	3.714E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	78	.0486	4.825E-02	4.4432E-02
UP SIDE(OS)	7386	113	78	.0486	4.825E-02	4.4432E-02
BOTTOM(BOT)	7514	113	78	.0486	4.825E-02	4.4432E-02
TOP(TOP)	8436	113	78	.0486	4.825E-02	4.4432E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
BOT 2284(113)	28.38	27.37	4.127E-04	.0357	5.042E-04	.0436	5.669E-04	.0490	1.315E-03
TOP 5284(113)	28.41	27.40	4.126E-04	.0357	5.039E-04	.0436	5.666E-04	.0490	1.315E-03
OS 84(113)	28.41	27.40	4.126E-04	.0357	5.039E-04	.0436	5.666E-04	.0490	1.315E-03
NOS 6784(113)	28.41	27.40	4.126E-04	.0357	5.039E-04	.0436	5.666E-04	.0490	1.315E-03
TOP 5285(113)	29.48	28.47	4.047E-04	.0350	4.943E-04	.0427	5.558E-04	.0480	1.288E-03
OS 85(113)	29.48	28.47	4.047E-04	.0350	4.943E-04	.0427	5.558E-04	.0480	1.288E-03
BOT 2385(113)	29.48	28.47	4.047E-04	.0350	4.943E-04	.0427	5.558E-04	.0480	1.288E-03
NOS 6785(113)	29.48	28.47	4.047E-04	.0350	4.943E-04	.0427	5.558E-04	.0480	1.288E-03
TOP 5286(113)	30.59	29.57	3.971E-04	.0343	4.850E-04	.0419	5.454E-04	.0471	1.263E-03
OS 86(113)	30.59	29.57	3.971E-04	.0343	4.850E-04	.0419	5.454E-04	.0471	1.263E-03
BOT 2386(113)	30.59	29.57	3.971E-04	.0343	4.850E-04	.0419	5.454E-04	.0471	1.263E-03
NOS 6786(113)	30.59	29.57	3.971E-04	.0343	4.850E-04	.0419	5.454E-04	.0471	1.263E-03
TOP 5287(113)	31.66	30.65	3.900E-04	.0337	4.764E-04	.0412	5.357E-04	.0463	1.241E-03
OS 87(113)	31.66	30.65	3.900E-04	.0337	4.764E-04	.0412	5.357E-04	.0463	1.241E-03
BOT 2387(113)	31.66	30.65	3.900E-04	.0337	4.764E-04	.0412	5.357E-04	.0463	1.241E-03
NOS 6787(113)	31.66	30.65	3.900E-04	.0337	4.764E-04	.0412	5.357E-04	.0463	1.241E-03
TOP 5288(113)	32.76	31.75	3.832E-04	.0331	4.681E-04	.0405	5.263E-04	.0455	1.219E-03
OS 88(113)	32.76	31.75	3.832E-04	.0331	4.681E-04	.0405	5.263E-04	.0455	1.219E-03
BOT 2388(113)	32.76	31.75	3.832E-04	.0331	4.681E-04	.0405	5.263E-04	.0455	1.219E-03
NOS 6788(113)	32.76	31.75	3.832E-04	.0331	4.681E-04	.0405	5.263E-04	.0455	1.219E-03
TOP 5289(113)	33.86	32.85	3.767E-04	.0326	4.602E-04	.0398	5.174E-04	.0447	1.199E-03
OS 89(113)	33.86	32.85	3.767E-04	.0326	4.602E-04	.0398	5.174E-04	.0447	1.199E-03
BOT 2389(113)	33.86	32.85	3.767E-04	.0326	4.602E-04	.0398	5.174E-04	.0447	1.199E-03
NOS 6789(113)	33.86	32.85	3.767E-04	.0326	4.602E-04	.0398	5.174E-04	.0447	1.199E-03
BOT 2390(113)	34.94	33.93	3.707E-04	.0320	4.528E-04	.0391	5.092E-04	.0440	1.180E-03

NASA-R1 OH50

VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL S

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PRESEND	ROLL-MODEL	YAW
1	1	7.90	185.5	1264	30.00	0	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
93.7	.012	.512	3748	1.050E-05	7.547E-08	5.213E 05	1.157E-02	3.711E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXX)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7610	113	78	.0486	4.825E-02	4.4432E-02
UP SIDE(OS)	7386	113	78	.0486	4.825E-02	4.4432E-02
HOTIGH(BOT)	7514	113	78	.0486	4.825E-02	4.4432E-02
TOP(TOP)	8436	113	78	.0486	4.825E-02	4.4432E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5290(113)	34.97	33.95	3.706E-04	.0320	4.527E-04	.0391	5.090E-04	.0440	1.179E-03
OS 90(113)	34.97	33.95	3.706E-04	.0320	4.527E-04	.0391	5.090E-04	.0440	1.179E-03
NOS 6790(113)	34.97	33.95	3.706E-04	.0320	4.527E-04	.0391	5.090E-04	.0440	1.179E-03
TOP 5291(113)	36.04	35.03	3.648E-04	.0315	4.457E-04	.0385	5.011E-04	.0433	1.161E-03
HOT 2391(113)	36.04	35.03	3.648E-04	.0315	4.457E-04	.0385	5.011E-04	.0433	1.161E-03
NOS 6791(113)	36.04	35.03	3.648E-04	.0315	4.457E-04	.0385	5.011E-04	.0433	1.161E-03
OS 91(113)	36.07	35.05	3.647E-04	.0315	4.455E-04	.0385	5.009E-04	.0433	1.161E-03
TOP 5292(113)	37.14	36.13	3.592E-04	.0311	4.388E-04	.0379	4.934E-04	.0427	1.144E-03
OS 92(113)	37.14	36.13	3.592E-04	.0311	4.388E-04	.0379	4.934E-04	.0427	1.144E-03
HOT 2392(113)	37.14	36.13	3.592E-04	.0311	4.388E-04	.0379	4.934E-04	.0427	1.144E-03
NOS 6792(113)	37.14	36.13	3.592E-04	.0311	4.388E-04	.0379	4.934E-04	.0427	1.144E-03
TOP 5293(113)	38.24	37.23	3.539E-04	.0306	4.323E-04	.0374	4.861E-04	.0420	1.127E-03
OS 93(113)	38.24	37.23	3.539E-04	.0306	4.323E-04	.0374	4.861E-04	.0420	1.127E-03
HOT 2393(113)	38.24	37.23	3.539E-04	.0306	4.323E-04	.0374	4.861E-04	.0420	1.127E-03
NOS 6793(113)	38.24	37.23	3.539E-04	.0306	4.323E-04	.0374	4.861E-04	.0420	1.127E-03
TOP 5294(113)	39.32	38.31	3.489E-04	.0301	4.262E-04	.0368	4.792E-04	.0414	1.109E-03
OS 94(113)	39.32	38.31	3.489E-04	.0301	4.262E-04	.0368	4.792E-04	.0414	1.109E-03
HOT 2394(113)	39.32	38.31	3.489E-04	.0301	4.262E-04	.0368	4.792E-04	.0414	1.109E-03
NOS 6794(113)	39.32	38.31	3.489E-04	.0301	4.262E-04	.0368	4.792E-04	.0414	1.109E-03
TOP 5295(113)	40.42	39.41	3.440E-04	.0297	4.202E-04	.0363	4.724E-04	.0408	1.095E-03
OS 95(113)	40.42	39.41	3.440E-04	.0297	4.202E-04	.0363	4.724E-04	.0408	1.095E-03
HOT 2395(113)	40.42	39.41	3.440E-04	.0297	4.202E-04	.0363	4.724E-04	.0408	1.095E-03
NOS 6795(113)	40.42	39.41	3.440E-04	.0297	4.202E-04	.0363	4.724E-04	.0408	1.095E-03
HOT 2396(113)	41.50	40.49	3.394E-04	.0293	4.145E-04	.0358	4.661E-04	.0403	1.080E-03
TOP 5296(113)	41.52	40.51	3.393E-04	.0293	4.144E-04	.0358	4.660E-04	.0403	1.080E-03
OS 96(113)	41.52	40.51	3.393E-04	.0293	4.144E-04	.0358	4.660E-04	.0403	1.080E-03
NOS 6796(113)	41.52	40.51	3.393E-04	.0293	4.144E-04	.0358	4.660E-04	.0403	1.080E-03

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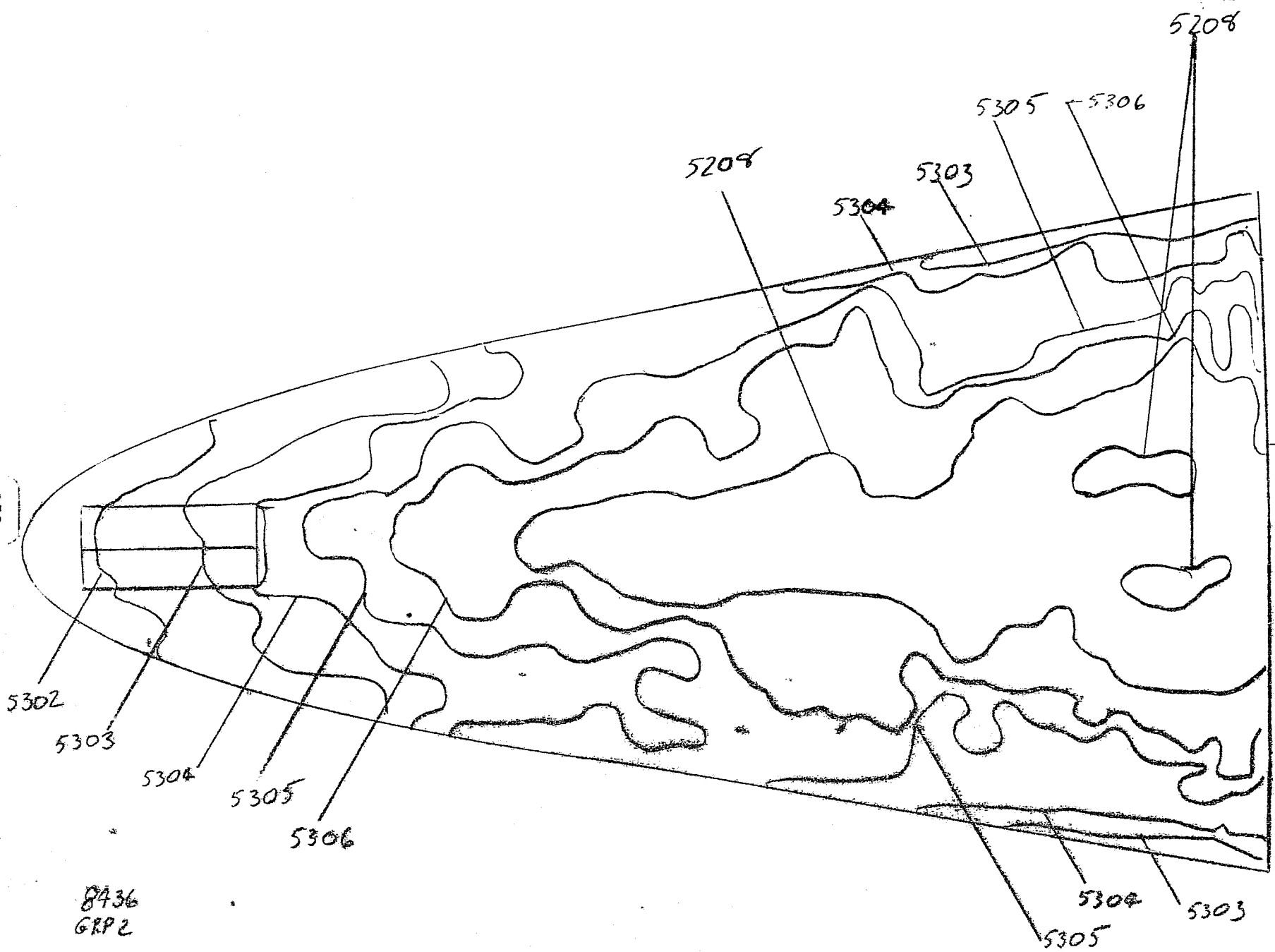
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VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

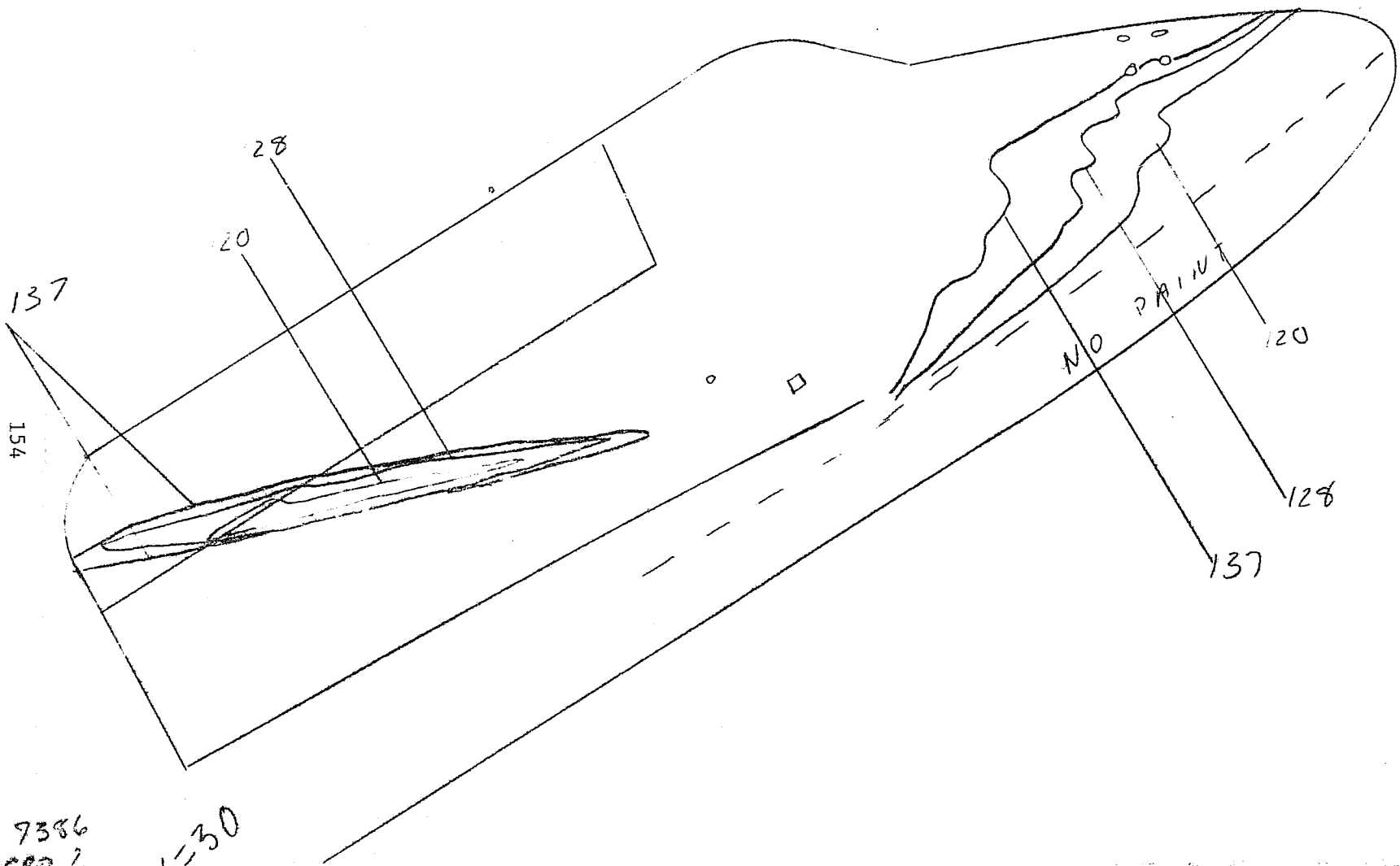
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
1	1	7.90	105.5	1264	30.00	0	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.012	.512	3748	1.050E-05	7.548E-08	5.212E 05	1.157E-02	3.711E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	78	.0486	4.825E-02	4.4432E-02
OP SIDE(OS)	7386	113	78	.0486	4.825E-02	4.4432E-02
BOTTOM(BOT)	7514	113	78	.0486	4.825E-02	4.4432E-02
TOP(TOP)	8436	113	78	.0486	4.825E-02	4.4432E-02

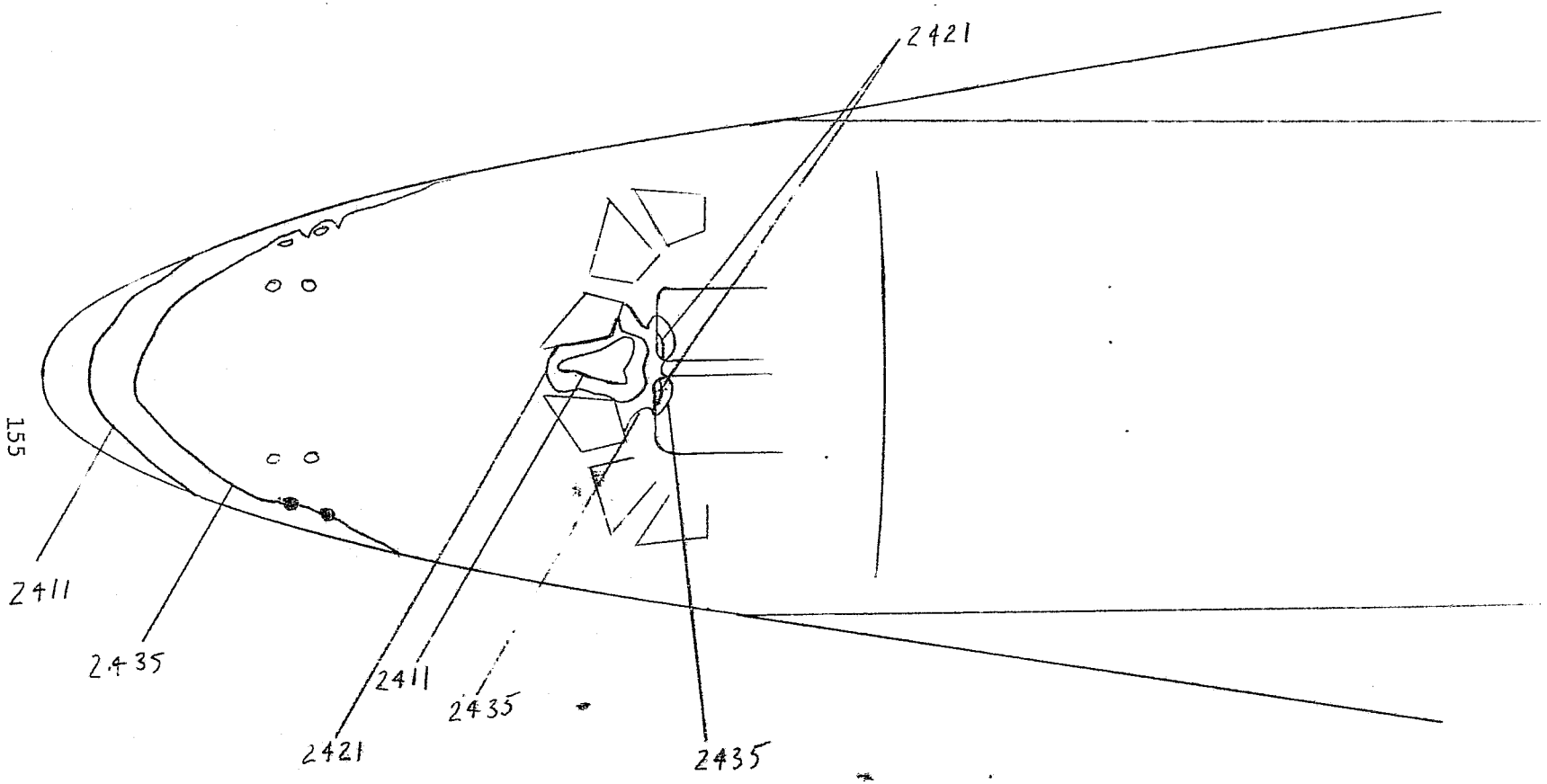
PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5297(113)	42.60	41.59	3.348E-04	.0289	4.090E-04	.0354	4.599E-04	.0397	1.066E-03
OS 97(113)	42.60	41.59	3.348E-04	.0289	4.090E-04	.0354	4.599E-04	.0397	1.066E-03
HOT 2397(113)	42.60	41.59	3.348E-04	.0289	4.090E-04	.0354	4.599E-04	.0397	1.066E-03
NOS 6797(113)	42.60	41.59	3.348E-04	.0289	4.090E-04	.0354	4.599E-04	.0397	1.066E-03
	43.02		MODEL HAS LEFT CENTERLINE						
TOP 5298(113)	43.70	42.69	3.305E-04	.0286	4.037E-04	.0349	4.539E-04	.0392	1.052E-03
OS 98(113)	43.70	42.69	3.305E-04	.0286	4.037E-04	.0349	4.539E-04	.0392	1.052E-03
HOT 2398(113)	43.70	42.69	3.305E-04	.0286	4.037E-04	.0349	4.539E-04	.0392	1.052E-03
NOS 6798(113)	43.70	42.69	3.305E-04	.0286	4.037E-04	.0349	4.539E-04	.0392	1.052E-03
HOT 2399(113)	44.78	43.76	3.264E-04	.0282	3.987E-04	.0345	4.483E-04	.0387	1.039E-03
TOP 5299(113)	44.80	43.79	3.263E-04	.0282	3.986E-04	.0344	4.482E-04	.0387	1.038E-03
OS 99(113)	44.80	43.79	3.263E-04	.0282	3.986E-04	.0344	4.482E-04	.0387	1.038E-03
NOS 6799(113	44.80	43.79	3.263E-04	.0282	3.986E-04	.0344	4.482E-04	.0387	1.038E-03


5208
5305
5306
5208
5303
5304
153
5302
5303
5304
5305
5306
8436
GRP 2
5304
5303
5305

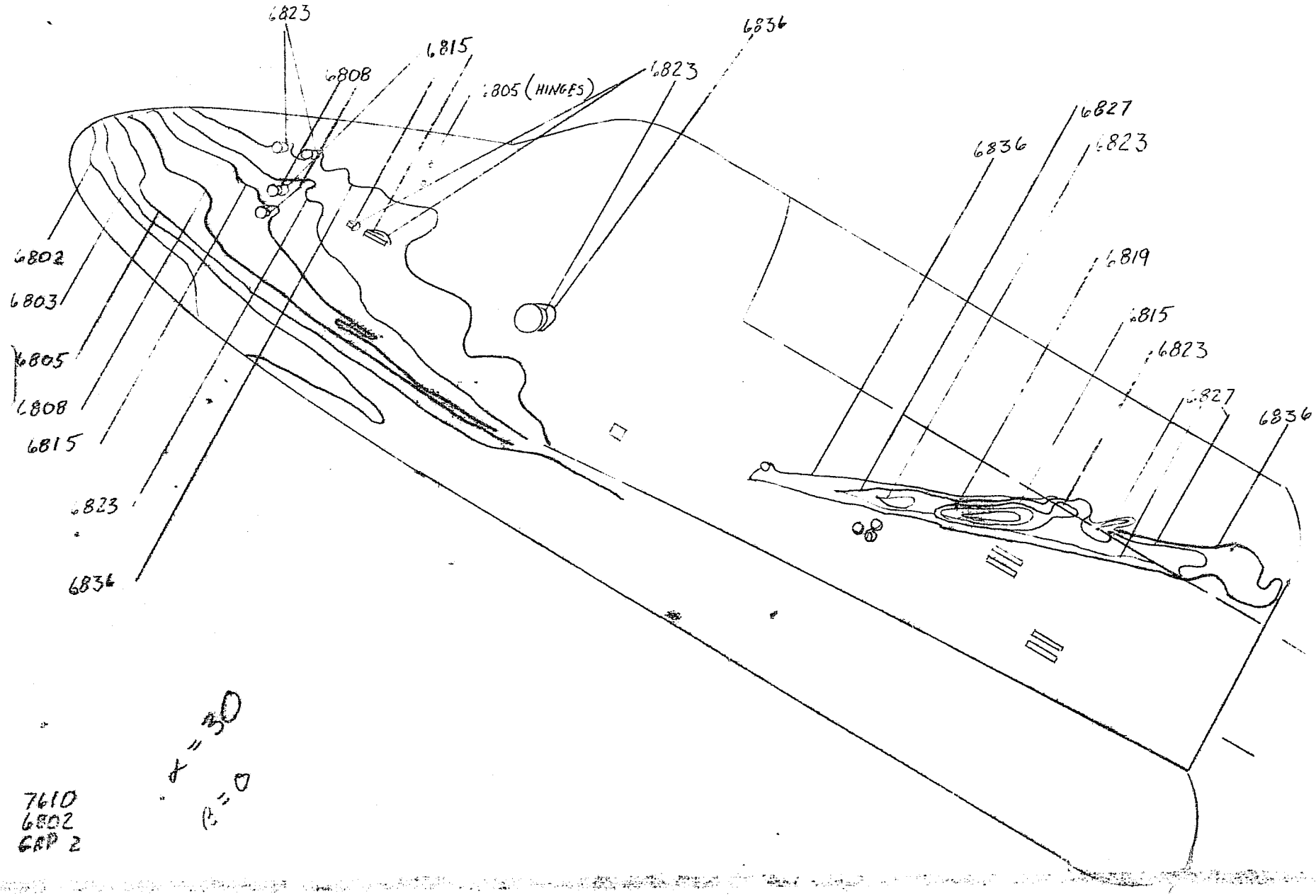


7386
CCD 2

+/-30



7514
GRP 2


6823
6815
6808
6805 (HINGES)
6823
6836
6827
6836
6823
6819
6815
6823
6827
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6802
6803
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GAP 2
156

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
2	1	7.90	106.5	1268	29.99	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.012	.517	3755	1.056E-05	7.574E-08	5.234E 05	1.163E-02	3.701E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	77	.0486	0	0
UP SIDE(US)	7386	113	77	.0486	0	0
BOTTOM(BOT)	7514	113	77	.0486	0	0
TOP(TOP)	8436	113	77	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 5300(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
US 100(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 2400(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 6800(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 5301(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
US 101(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 2401(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 6801(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 5302(113)	2.18	1.17	2.041E-03	.1755	2.492E-03	.2142	2.801E-03	.2408	6.444E-03
US 102(113)	2.18	1.17	2.041E-03	.1755	2.492E-03	.2142	2.801E-03	.2408	6.444E-03
HOT 2402(113)	2.18	1.17	2.041E-03	.1755	2.492E-03	.2142	2.801E-03	.2408	6.444E-03
NOS 6802(113)	2.18	1.17	2.041E-03	.1755	2.492E-03	.2142	2.801E-03	.2408	6.444E-03
TOP 5303(113)	3.28	2.27	1.464E-03	.1258	1.787E-03	.1536	2.009E-03	.1727	4.621E-03
US 103(113)	3.28	2.27	1.464E-03	.1258	1.787E-03	.1536	2.009E-03	.1727	4.621E-03
HOT 2403(113)	3.28	2.27	1.464E-03	.1258	1.787E-03	.1536	2.009E-03	.1727	4.621E-03
NOS 6803(113)	3.28	2.27	1.464E-03	.1258	1.787E-03	.1536	2.009E-03	.1727	4.621E-03
TOP 5304(113)	4.36	3.34	1.205E-03	.1036	1.471E-03	.1264	1.654E-03	.1421	3.802E-03
HOT 2404(113)	4.36	3.34	1.205E-03	.1036	1.471E-03	.1264	1.654E-03	.1421	3.802E-03
NOS 6804(113)	4.36	3.34	1.205E-03	.1036	1.471E-03	.1264	1.654E-03	.1421	3.802E-03
US 104(113)	4.38	3.37	1.201E-03	.1032	1.466E-03	.1260	1.648E-03	.1416	3.791E-03
TOP 5305(113)	5.46	4.44	1.045E-03	.0896	1.276E-03	.1094	1.435E-03	.1230	3.285E-03
US 105(113)	5.46	4.44	1.045E-03	.0896	1.276E-03	.1094	1.435E-03	.1230	3.285E-03
HOT 2405(113)	5.46	4.44	1.045E-03	.0896	1.276E-03	.1094	1.435E-03	.1230	3.285E-03
NOS 6805(113)	5.46	4.44	1.045E-03	.0896	1.276E-03	.1094	1.435E-03	.1230	3.285E-03
TOP 5306(113)	6.56	5.55	9.358E-04	.0804	1.142E-03	.0982	1.284E-03	.1103	2.952E-03
US 106(113)	6.56	5.55	9.358E-04	.0804	1.142E-03	.0982	1.284E-03	.1103	2.952E-03
HOT 2406(113)	6.56	5.55	9.358E-04	.0804	1.142E-03	.0982	1.284E-03	.1103	2.952E-03
NOS 6806(113)	6.56	5.55	9.358E-04	.0804	1.142E-03	.0982	1.284E-03	.1103	2.952E-03

REPRODUCED FROM ORIGINAL

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
2	1	7.90	106.6	1269	29.99	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
94.1	.012	.518	3755	1.057E-05	7.576E-08	5.237E 05	1.164E-02	3.700E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7610	113	77	.0486	4.920E-02	4.5347E-02
UP SIDE(OS)	7386	113	77	.0486	4.920E-02	4.5347E-02
HOTTOM(BOT)	7514	113	77	.0486	4.920E-02	4.5347E-02
TOP(TOP)	8436	113	77	.0486	4.920E-02	4.5347E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
HOT 2407(113)	7.63	6.42	8.564E-04	.0736	1.046E-03	.0899	1.175E-03	.1010	2.704E-03
TOP 5307(113)	7.66	6.45	8.548E-04	.0734	1.044E-03	.0897	1.173E-03	.1008	2.696E-03
OS 107(113)	7.66	6.45	8.548E-04	.0734	1.044E-03	.0897	1.173E-03	.1008	2.696E-03
NOS 6807(113)	7.66	6.45	8.548E-04	.0734	1.044E-03	.0897	1.173E-03	.1008	2.696E-03
TOP 5308(113)	8.74	7.72	7.930E-04	.0681	9.681E-04	.0832	1.088E-03	.0935	2.501E-03
OS 108(113)	8.74	7.72	7.930E-04	.0681	9.681E-04	.0832	1.088E-03	.0935	2.501E-03
HOT 2408(113)	8.74	7.72	7.930E-04	.0681	9.681E-04	.0832	1.088E-03	.0935	2.501E-03
NOS 6808(113)	8.74	7.72	7.930E-04	.0681	9.681E-04	.0832	1.088E-03	.0935	2.501E-03
TOP 5309(113)	9.84	8.82	7.419E-04	.0637	9.057E-04	.0778	1.018E-03	.0875	2.340E-03
OS 109(113)	9.84	8.82	7.419E-04	.0637	9.057E-04	.0778	1.018E-03	.0875	2.340E-03
HOT 2409(113)	9.84	8.82	7.419E-04	.0637	9.057E-04	.0778	1.018E-03	.0875	2.340E-03
NOS 6809(113)	9.84	8.82	7.419E-04	.0637	9.057E-04	.0778	1.018E-03	.0875	2.340E-03
TOP 5310(113)	10.94	9.93	6.995E-04	.0601	8.540E-04	.0733	9.599E-04	.0824	2.204E-03
OS 110(113)	10.94	9.93	6.995E-04	.0601	8.540E-04	.0733	9.599E-04	.0824	2.204E-03
HOT 2410(113)	10.94	9.93	6.995E-04	.0601	8.540E-04	.0733	9.599E-04	.0824	2.204E-03
NOS 6810(113)	10.94	9.93	6.995E-04	.0601	8.540E-04	.0733	9.599E-04	.0824	2.204E-03
HOT 2411(113)	12.01	11.00	6.644E-04	.0571	8.111E-04	.0697	9.118E-04	.0783	2.096E-03
TOP 5311(113)	12.04	11.03	6.637E-04	.0570	8.102E-04	.0696	9.107E-04	.0782	2.091E-03
OS 111(113)	12.04	11.03	6.637E-04	.0570	8.102E-04	.0696	9.107E-04	.0782	2.091E-03
NOS 6811(113)	12.04	11.03	6.637E-04	.0570	8.102E-04	.0696	9.107E-04	.0782	2.091E-03
TOP 5312(113)	13.12	12.10	6.335E-04	.0545	7.734E-04	.0665	8.693E-04	.0747	2.000E-03
OS 112(113)	13.12	12.10	6.335E-04	.0545	7.734E-04	.0665	8.693E-04	.0747	2.000E-03
HOT 2412(113)	13.12	12.10	6.335E-04	.0545	7.734E-04	.0665	8.693E-04	.0747	2.000E-03
NOS 6812(113)	13.12	12.10	6.335E-04	.0545	7.734E-04	.0665	8.693E-04	.0747	2.000E-03
TOP 5313(113)	14.22	13.20	6.065E-04	.0521	7.404E-04	.0636	8.322E-04	.0715	1.915E-03
OS 113(113)	14.22	13.20	6.065E-04	.0521	7.404E-04	.0636	8.322E-04	.0715	1.915E-03
HOT 2413(113)	14.22	13.20	6.065E-04	.0521	7.404E-04	.0636	8.322E-04	.0715	1.915E-03
NOS 6813(113)	14.22	13.20	6.065E-04	.0521	7.404E-04	.0636	8.322E-04	.0715	1.915E-03

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VA526

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
2	1	7.90	106.5	1269	29.99	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.012	.517	3755	1.056E-05	7.577E-08	5.232E 05	1.162E-02	3.702E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	77	.0486	4.920E-02	4.5347E-02
OP SIDE(OS)	7386	113	77	.0486	4.920E-02	4.5347E-02
BOTTOM(BOT)	7514	113	77	.0486	4.920E-02	4.5347E-02
TOP(TOP)	8436	113	77	.0486	4.920E-02	4.5347E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5314(113)	15.29	14.28	5.832E-04	.0501	7.120E-04	.0611	8.003E-04	.0687	1.838E-03
OS 114(113)	15.32	14.31	5.827E-04	.0501	7.113E-04	.0611	7.996E-04	.0687	1.838E-03
BOT 2414(113)	15.32	14.31	5.827E-04	.0501	7.113E-04	.0611	7.996E-04	.0687	1.838E-03
NOS 6814(113)	15.32	14.31	5.827E-04	.0501	7.113E-04	.0611	7.996E-04	.0687	1.838E-03
TOP 5315(113)	16.39	15.38	5.619E-04	.0483	6.860E-04	.0589	7.711E-04	.0662	1.771E-03
OS 115(113)	16.39	15.38	5.619E-04	.0483	6.860E-04	.0589	7.711E-04	.0662	1.771E-03
BOT 2415(113)	16.39	15.38	5.619E-04	.0483	6.860E-04	.0589	7.711E-04	.0662	1.771E-03
NOS 6815(113)	16.39	15.38	5.619E-04	.0483	6.860E-04	.0589	7.711E-04	.0662	1.771E-03
TOP 5316(113)	17.50	16.48	5.428E-04	.0466	6.627E-04	.0569	7.449E-04	.0640	1.711E-03
OS 116(113)	17.50	16.48	5.428E-04	.0466	6.627E-04	.0569	7.449E-04	.0640	1.711E-03
BOT 2416(113)	17.50	16.48	5.428E-04	.0466	6.627E-04	.0569	7.449E-04	.0640	1.711E-03
NOS 6816(113)	17.50	16.48	5.428E-04	.0466	6.627E-04	.0569	7.449E-04	.0640	1.711E-03
TOP 5317(113)	18.60	17.58	5.256E-04	.0452	6.416E-04	.0551	7.212E-04	.0620	1.658E-03
OS 117(113)	18.60	17.58	5.256E-04	.0452	6.416E-04	.0551	7.212E-04	.0620	1.658E-03
BOT 2417(113)	18.60	17.58	5.256E-04	.0452	6.416E-04	.0551	7.212E-04	.0620	1.658E-03
NOS 6817(113)	18.60	17.58	5.256E-04	.0452	6.416E-04	.0551	7.212E-04	.0620	1.658E-03
BOT 2418(113)	19.67	18.66	5.102E-04	.0438	6.228E-04	.0535	7.001E-04	.0601	1.609E-03
TOP 5318(113)	19.70	18.69	5.098E-04	.0438	6.224E-04	.0535	6.996E-04	.0601	1.608E-03
OS 118(113)	19.70	18.69	5.098E-04	.0438	6.224E-04	.0535	6.996E-04	.0601	1.608E-03
NOS 6818(113)	19.70	18.69	5.098E-04	.0438	6.224E-04	.0535	6.996E-04	.0601	1.608E-03
TOP 5319(113)	20.77	19.76	4.958E-04	.0426	6.052E-04	.0520	6.803E-04	.0584	1.562E-03
OS 119(113)	20.77	19.76	4.958E-04	.0426	6.052E-04	.0520	6.803E-04	.0584	1.562E-03
BOT 2419(113)	20.77	19.76	4.958E-04	.0426	6.052E-04	.0520	6.803E-04	.0584	1.562E-03
NOS 6819(113)	20.77	19.76	4.958E-04	.0426	6.052E-04	.0520	6.803E-04	.0584	1.562E-03
TOP 5320(113)	21.88	20.86	4.825E-04	.0414	5.890E-04	.0506	6.621E-04	.0569	1.521E-03
OS 120(113)	21.88	20.86	4.825E-04	.0414	5.890E-04	.0506	6.621E-04	.0569	1.521E-03
BOT 2420(113)	21.88	20.86	4.825E-04	.0414	5.890E-04	.0506	6.621E-04	.0569	1.521E-03
NOS 6820(113)	21.88	20.86	4.825E-04	.0414	5.890E-04	.0506	6.621E-04	.0569	1.521E-03

3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
2	1	7.90	106.7	1269	29.99	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.012	.518	3755	1.057E-05	7.578E-08	5.240E 05	1.164E-02	3.699E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	77	.0486	4.920E-02	4.5347E-02
UP SIDE(OS)	7386	113	77	.0486	4.920E-02	4.5347E-02
HOTICM(HOT)	7514	113	77	.0486	4.920E-02	4.5347E-02
TOP(TOP)	8436	113	77	.0486	4.920E-02	4.5347E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5321(113)	22.98	21.96	4.702E-04	.0404	5.741E-04	.0493	6.453E-04	.0554	1.482E-03
OS 121(113)	22.98	21.96	4.702E-04	.0404	5.741E-04	.0493	6.453E-04	.0554	1.482E-03
HOT 2421(113)	22.98	21.96	4.702E-04	.0404	5.741E-04	.0493	6.453E-04	.0554	1.482E-03
NOS 6821(113)	22.98	21.96	4.702E-04	.0404	5.741E-04	.0493	6.453E-04	.0554	1.482E-03
TOP 5322(113)	24.05	23.04	4.591E-04	.0394	5.605E-04	.0482	6.300E-04	.0541	1.448E-03
OS 122(113)	24.05	23.04	4.591E-04	.0394	5.605E-04	.0482	6.300E-04	.0541	1.448E-03
HOT 2422(113)	24.05	23.04	4.591E-04	.0394	5.605E-04	.0482	6.300E-04	.0541	1.448E-03
NOS 6822(113)	24.05	23.04	4.591E-04	.0394	5.605E-04	.0482	6.300E-04	.0541	1.448E-03
TOP 5323(113)	25.15	24.14	4.485E-04	.0385	5.476E-04	.0470	6.155E-04	.0529	1.415E-03
OS 123(113)	25.15	24.14	4.485E-04	.0385	5.476E-04	.0470	6.155E-04	.0529	1.415E-03
HOT 2423(113)	25.15	24.14	4.485E-04	.0385	5.476E-04	.0470	6.155E-04	.0529	1.415E-03
NOS 6823(113)	25.15	24.14	4.485E-04	.0385	5.476E-04	.0470	6.155E-04	.0529	1.415E-03
TOP 5324(113)	26.26	25.24	4.386E-04	.0377	5.355E-04	.0460	6.019E-04	.0517	1.384E-03
OS 124(113)	26.26	25.24	4.386E-04	.0377	5.355E-04	.0460	6.019E-04	.0517	1.384E-03
HOT 2424(113)	26.26	25.24	4.386E-04	.0377	5.355E-04	.0460	6.019E-04	.0517	1.384E-03
NOS 6824(113)	26.26	25.24	4.386E-04	.0377	5.355E-04	.0460	6.019E-04	.0517	1.384E-03
HOT 2425(113)	27.33	26.32	4.296E-04	.0369	5.244E-04	.0451	5.895E-04	.0506	1.355E-03
TOP 5325(113)	27.36	26.34	4.294E-04	.0369	5.242E-04	.0450	5.892E-04	.0506	1.353E-03
OS 125(113)	27.36	26.34	4.294E-04	.0369	5.242E-04	.0450	5.892E-04	.0506	1.353E-03
NOS 6825(113)	27.36	26.34	4.294E-04	.0369	5.242E-04	.0450	5.892E-04	.0506	1.353E-03
TOP 5326(113)	28.43	27.42	4.209E-04	.0362	5.138E-04	.0441	5.775E-04	.0496	1.327E-03
OS 126(113)	28.43	27.42	4.209E-04	.0362	5.138E-04	.0441	5.775E-04	.0496	1.327E-03
HOT 2426(113)	28.43	27.42	4.209E-04	.0362	5.138E-04	.0441	5.775E-04	.0496	1.327E-03
NOS 6826(113)	28.43	27.42	4.209E-04	.0362	5.138E-04	.0441	5.775E-04	.0496	1.327E-03
TOP 5327(113)	29.53	28.52	4.127E-04	.0355	5.038E-04	.0433	5.663E-04	.0487	1.302E-03
OS 127(113)	29.53	28.52	4.127E-04	.0355	5.038E-04	.0433	5.663E-04	.0487	1.302E-03
HOT 2427(113)	29.53	28.52	4.127E-04	.0355	5.038E-04	.0433	5.663E-04	.0487	1.302E-03
NOS 6827(113)	29.53	28.52	4.127E-04	.0355	5.038E-04	.0433	5.663E-04	.0487	1.302E-03

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
2	1	7.90	106.6	1269	29.99	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
94.1	.012	.518	3755	1.056E-05	7.577E-08	5.236E 05	1.164E-02	3.700E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	77	.0486	4.920E-02	4.5347E-02
OP SIDE(OS)	7386	113	77	.0486	4.920E-02	4.5347E-02
BOTTOM(BOT)	7514	113	77	.0486	4.920E-02	4.5347E-02
TOP(TOP)	8436	113	77	.0486	4.920E-02	4.5347E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
BOT 2428(113)	30.61	29.60	4.051E-04	.0348	4.945E-04	.0425	5.559E-04	.0477	1.277E-03
TOP 5328(113)	30.64	29.62	4.049E-04	.0348	4.943E-04	.0425	5.556E-04	.0478	1.278E-03
OS 128(113)	30.64	29.62	4.049E-04	.0348	4.943E-04	.0425	5.556E-04	.0478	1.278E-03
NOS 6828(113)	30.64	29.62	4.049E-04	.0348	4.943E-04	.0425	5.556E-04	.0478	1.278E-03
TOP 5329(113)	31.71	30.70	3.978E-04	.0342	4.856E-04	.0417	5.458E-04	.0469	1.254E-03
OS 129(113)	31.71	30.70	3.978E-04	.0342	4.856E-04	.0417	5.458E-04	.0469	1.254E-03
BOT 2429(113)	31.71	30.70	3.978E-04	.0342	4.856E-04	.0417	5.458E-04	.0469	1.254E-03
NOS 6829(113)	31.71	30.70	3.978E-04	.0342	4.856E-04	.0417	5.458E-04	.0469	1.254E-03
TOP 5330(113)	32.81	31.80	3.908E-04	.0336	4.771E-04	.0410	5.363E-04	.0461	1.233E-03
OS 130(113)	32.81	31.80	3.908E-04	.0336	4.771E-04	.0410	5.363E-04	.0461	1.233E-03
BOT 2430(113)	32.81	31.80	3.908E-04	.0336	4.771E-04	.0410	5.363E-04	.0461	1.233E-03
NOS 6830(113)	32.81	31.80	3.908E-04	.0336	4.771E-04	.0410	5.363E-04	.0461	1.233E-03
OS 131(113)	33.89	32.88	3.844E-04	.0330	4.692E-04	.0403	5.274E-04	.0453	1.212E-03
TOP 5331(113)	33.91	32.90	3.842E-04	.0330	4.691E-04	.0403	5.272E-04	.0453	1.212E-03
BOT 2431(113)	33.91	32.90	3.842E-04	.0330	4.691E-04	.0403	5.272E-04	.0453	1.212E-03
NOS 6831(113)	33.91	32.90	3.842E-04	.0330	4.691E-04	.0403	5.272E-04	.0453	1.212E-03
TOP 5332(113)	34.99	33.98	3.781E-04	.0325	4.616E-04	.0397	5.188E-04	.0446	1.193E-03
OS 132(113)	34.99	33.98	3.781E-04	.0325	4.616E-04	.0397	5.188E-04	.0446	1.193E-03
BOT 2432(113)	34.99	33.98	3.781E-04	.0325	4.616E-04	.0397	5.188E-04	.0446	1.193E-03
NOS 6832(113)	34.99	33.98	3.781E-04	.0325	4.616E-04	.0397	5.188E-04	.0446	1.193E-03
TOP 5333(113)	36.09	35.08	3.721E-04	.0320	4.543E-04	.0390	5.106E-04	.0438	1.173E-03
OS 133(113)	36.09	35.08	3.721E-04	.0320	4.543E-04	.0390	5.106E-04	.0438	1.173E-03
BOT 2433(113)	36.09	35.08	3.721E-04	.0320	4.543E-04	.0390	5.106E-04	.0438	1.173E-03
NOS 6833(113)	36.09	35.08	3.721E-04	.0320	4.543E-04	.0390	5.106E-04	.0438	1.173E-03
TOP 5334(113)	37.19	36.18	3.664E-04	.0315	4.473E-04	.0384	5.028E-04	.0432	1.155E-03
OS 134(113)	37.19	36.18	3.664E-04	.0315	4.473E-04	.0384	5.028E-04	.0432	1.155E-03
BOT 2434(113)	37.19	36.18	3.664E-04	.0315	4.473E-04	.0384	5.028E-04	.0432	1.155E-03
NOS 6834(113)	37.19	36.18	3.664E-04	.0315	4.473E-04	.0384	5.028E-04	.0432	1.155E-03

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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

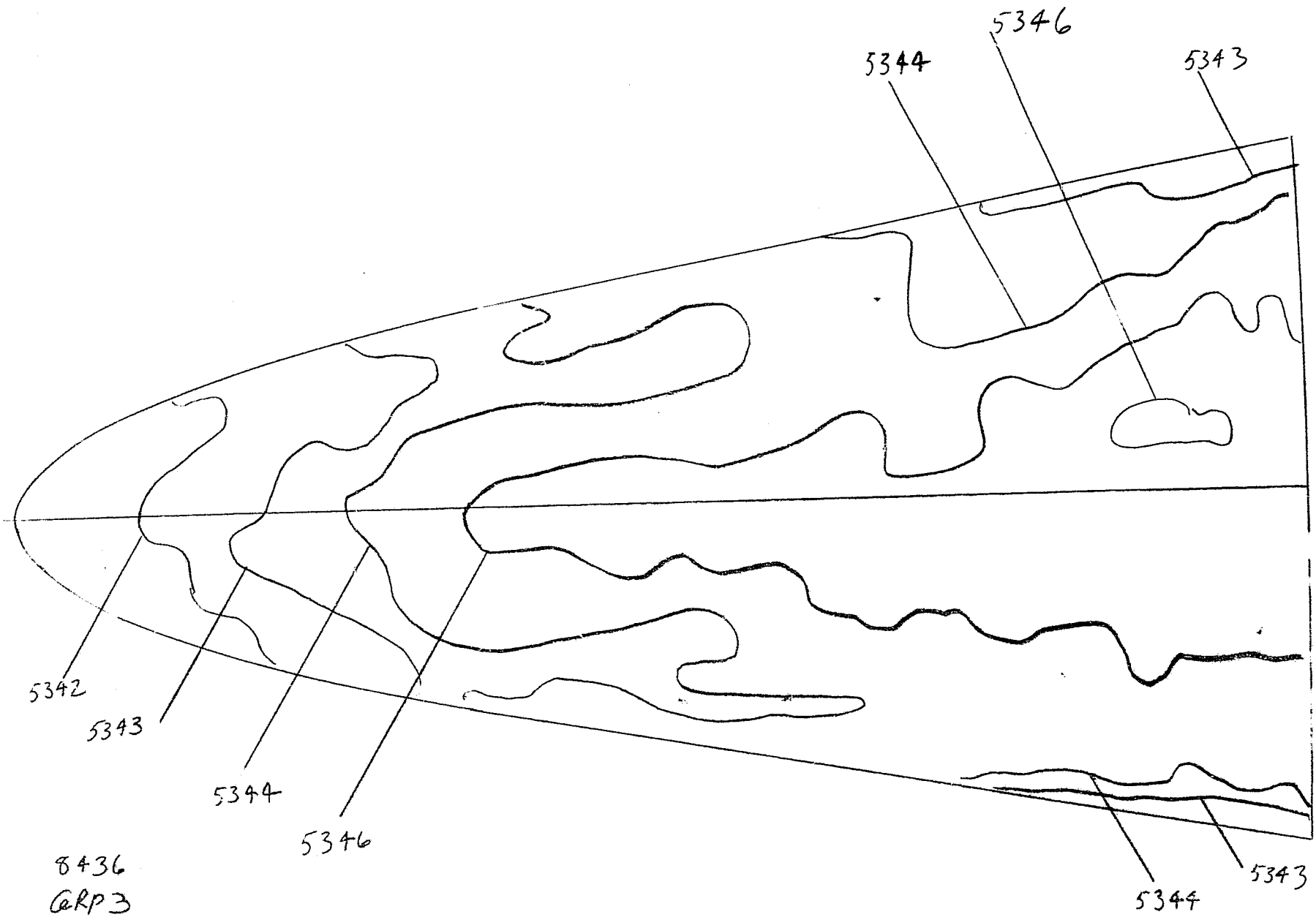
VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
2	1	7.90	106.7	1269	29.99	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.012	.518	3756	1.057E-05	7.578E-08	5.240E 05	1.164E-02	3.699E-02

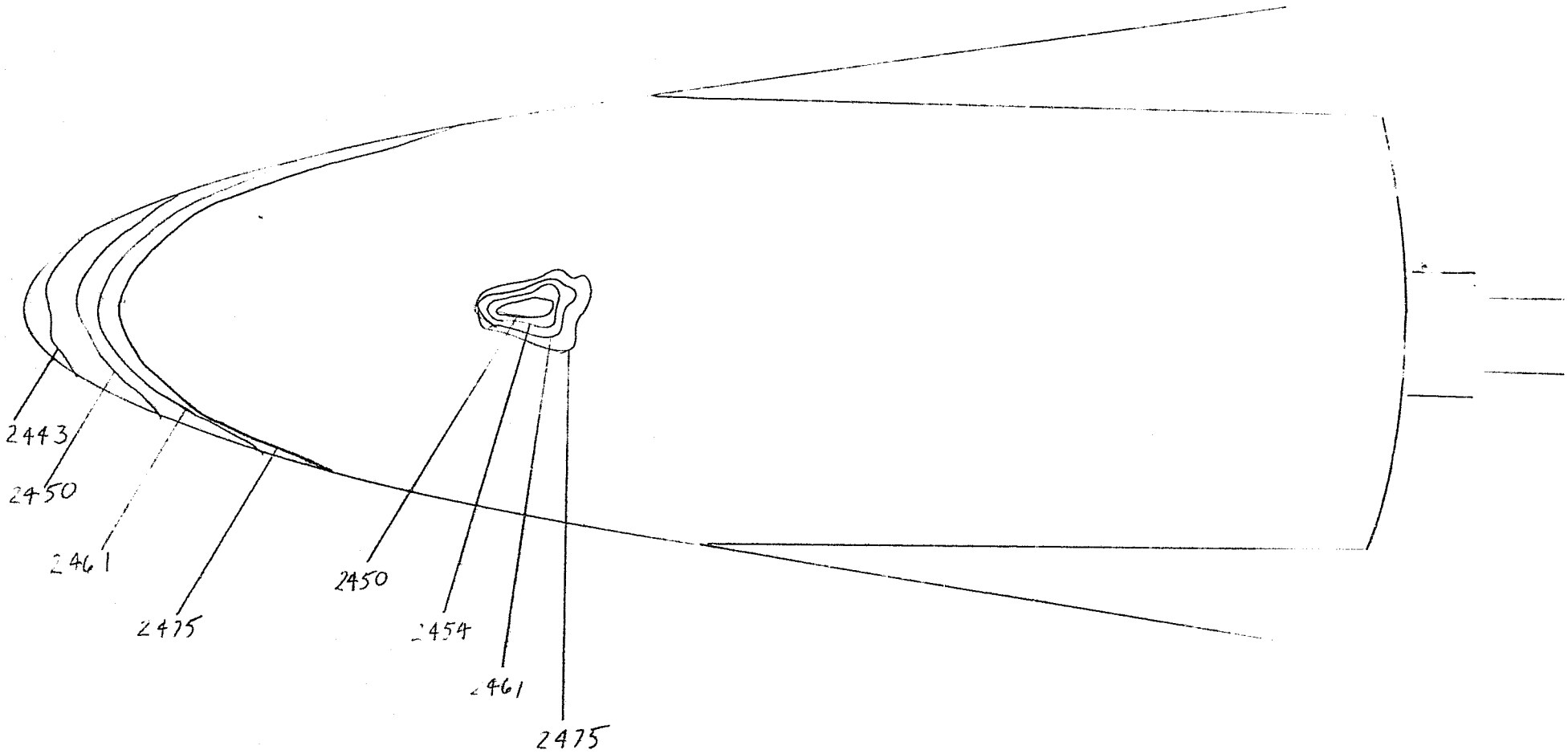
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	77	.0486	4.920E-02	4.5347E-02
OP SIDE(OS)	7386	113	77	.0486	4.920E-02	4.5347E-02
BOTTOM(BOT)	7514	113	77	.0486	4.920E-02	4.5347E-02
TOP(TOP)	8436	113	77	.0486	4.920E-02	4.5347E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
BOT 2435(113)	38.27	37.26	3.611E-04	.0310	4.408E-04	.0379	4.955E-04	.0426	1.139E-03
TOP 5335(113)	38.29	37.28	3.609E-04	.0310	4.406E-04	.0378	4.953E-04	.0425	1.138E-03
OS 135(113)	38.29	37.28	3.609E-04	.0310	4.406E-04	.0378	4.953E-04	.0425	1.138E-03
NOS 6835(113)	38.29	37.28	3.609E-04	.0310	4.406E-04	.0378	4.953E-04	.0425	1.138E-03
TOP 5336(113)	39.37	38.36	3.558E-04	.0306	4.344E-04	.0373	4.883E-04	.0420	1.124E-03
OS 136(113)	39.37	38.36	3.558E-04	.0306	4.344E-04	.0373	4.883E-04	.0420	1.124E-03
BOT 2436(113)	39.37	38.36	3.558E-04	.0306	4.344E-04	.0373	4.883E-04	.0420	1.124E-03
NOS 6836(113)	39.37	38.36	3.558E-04	.0306	4.344E-04	.0373	4.883E-04	.0420	1.124E-03
TOP 5337(113)	40.47	39.46	3.508E-04	.0302	4.283E-04	.0368	4.814E-04	.0414	1.108E-03
OS 137(113)	40.47	39.46	3.508E-04	.0302	4.283E-04	.0368	4.814E-04	.0414	1.108E-03
BOT 2437(113)	40.47	39.46	3.508E-04	.0302	4.283E-04	.0368	4.814E-04	.0414	1.108E-03
NOS 6837(113)	40.47	39.46	3.508E-04	.0302	4.283E-04	.0368	4.814E-04	.0414	1.108E-03
	41.12		MODEL HAS LEFT CENTERLINE						
TOP 5338(113)	41.57	40.56	3.460E-04	.0297	4.225E-04	.0363	4.749E-04	.0408	1.092E-03
OS 138(113)	41.57	40.56	3.460E-04	.0297	4.225E-04	.0363	4.749E-04	.0408	1.092E-03
BOT 2438(113)	41.57	40.56	3.460E-04	.0297	4.225E-04	.0363	4.749E-04	.0408	1.092E-03
NOS 6838(113)	41.57	40.56	3.460E-04	.0297	4.225E-04	.0363	4.749E-04	.0408	1.092E-03
TOP 5339(113)	42.65	41.64	3.415E-04	.0293	4.170E-04	.0358	4.687E-04	.0403	1.077E-03
OS 139(113)	42.65	41.64	3.415E-04	.0293	4.170E-04	.0358	4.687E-04	.0403	1.077E-03
BOT 2439(113)	42.65	41.64	3.415E-04	.0293	4.170E-04	.0358	4.687E-04	.0403	1.077E-03
NOS 6839(113)	42.65	41.64	3.415E-04	.0293	4.170E-04	.0358	4.687E-04	.0403	1.077E-03



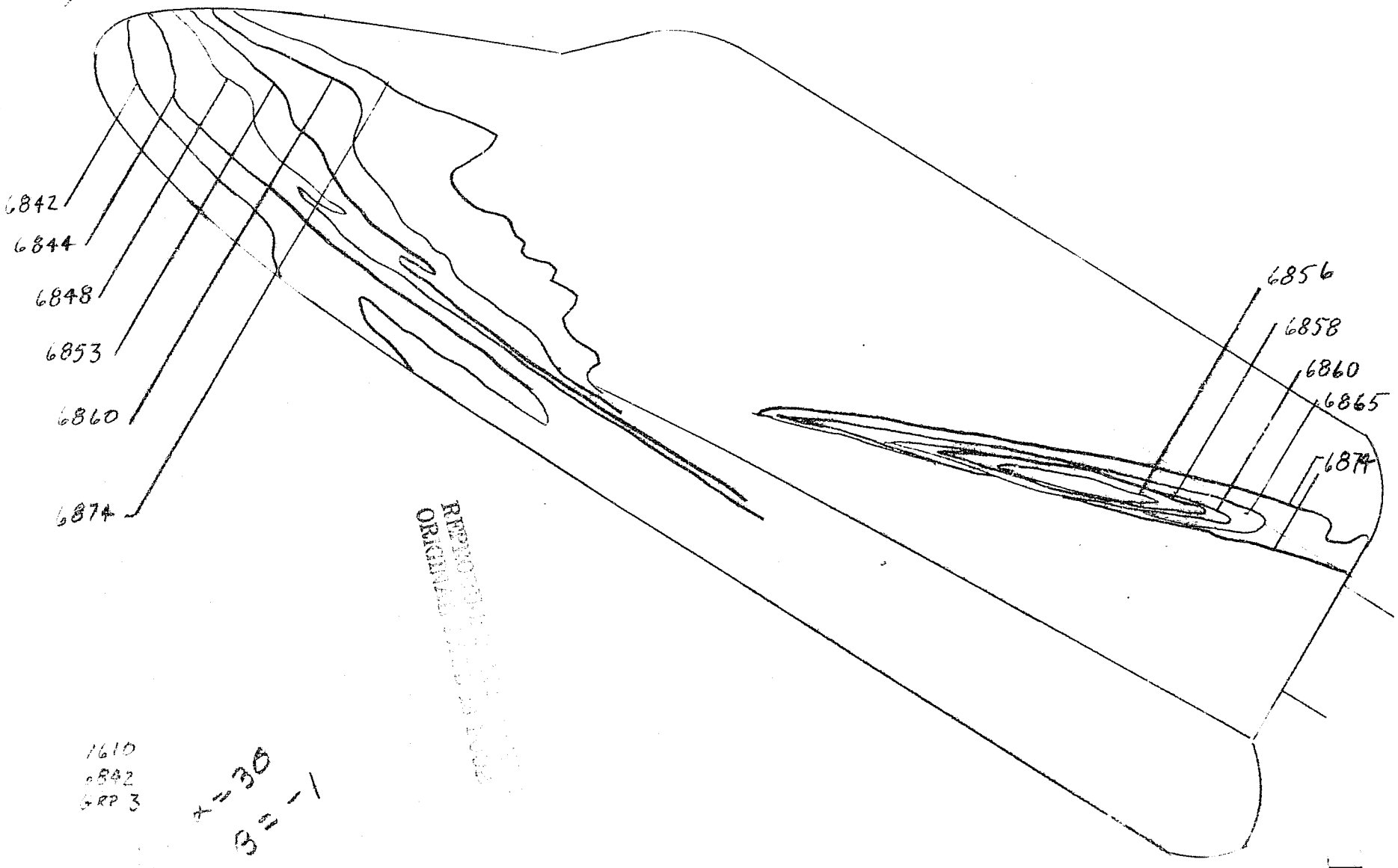
8436
@RP3

167
173
164
NO PAINT
56
167
173
7386
GRP 3



165

75 4
GRP 3



1610
6842
GRP 3

$\alpha = 30$

$\beta = -1$

3/29/74

NASA-RI 0H50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
3	1	7.98	106.1	1272	29.96	.03	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.515	3760	1.449E-05	7.594E-08	5.194E 05	1.162E-02	3.714E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	77	.0486	0	0
UP SIDE(OS)	7386	113	77	.0486	0	0
BOTTOM(BOT)	7514	113	77	.0486	0	0
TOP(TOP)	8436	113	77	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	SI(TO)
TO 5340(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 140(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 2440(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 6840(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 2441(113)	1.08		MODEL HAS NOT REACHED CENTERLINE						
TO 5341(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 141(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 6841(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 5342(113)	2.18	1.17	2.033E-03	.1749	2.479E-03	.2132	2.785E-03	.2396	6.438E-03
OS 142(113)	2.18	1.17	2.033E-03	.1749	2.479E-03	.2132	2.785E-03	.2396	6.438E-03
HOT 2442(113)	2.18	1.17	2.033E-03	.1749	2.479E-03	.2132	2.785E-03	.2396	6.438E-03
NOS 6842(113)	2.18	1.17	2.033E-03	.1749	2.479E-03	.2132	2.785E-03	.2396	6.438E-03
HOT 2443(113)	3.25	2.24	1.466E-03	.1260	1.788E-03	.1537	2.009E-03	.1727	4.638E-03
TOP 5343(113)	3.28	2.27	1.458E-03	.1254	1.778E-03	.1528	1.997E-03	.1717	4.613E-03
OS 143(113)	3.28	2.27	1.458E-03	.1254	1.778E-03	.1528	1.997E-03	.1717	4.613E-03
NOS 6843(113)	3.28	2.27	1.458E-03	.1254	1.778E-03	.1528	1.997E-03	.1717	4.613E-03
TOP 5344(113)	4.36	3.34	1.201E-03	.1032	1.464E-03	.1258	1.645E-03	.1414	3.798E-03
OS 144(113)	4.36	3.34	1.201E-03	.1032	1.464E-03	.1258	1.645E-03	.1414	3.798E-03
HOT 2444(113)	4.36	3.34	1.201E-03	.1032	1.464E-03	.1258	1.645E-03	.1414	3.798E-03
NOS 6844(113)	4.36	3.34	1.201E-03	.1032	1.464E-03	.1258	1.645E-03	.1414	3.798E-03
TOP 5345(113)	5.46	4.44	1.041E-03	.0895	1.270E-03	.1091	1.427E-03	.1226	3.294E-03
OS 145(113)	5.46	4.44	1.041E-03	.0895	1.270E-03	.1091	1.427E-03	.1226	3.294E-03
HOT 2445(113)	5.46	4.44	1.041E-03	.0895	1.270E-03	.1091	1.427E-03	.1226	3.294E-03
NOS 6845(113)	5.46	4.44	1.041E-03	.0895	1.270E-03	.1091	1.427E-03	.1226	3.294E-03
TOP 5346(113)	6.56	5.55	9.323E-04	.0801	1.137E-03	.0977	1.277E-03	.1098	2.949E-03
OS 146(113)	6.56	5.55	9.323E-04	.0801	1.137E-03	.0977	1.277E-03	.1098	2.949E-03
HOT 2446(113)	6.56	5.55	9.323E-04	.0801	1.137E-03	.0977	1.277E-03	.1098	2.949E-03
NOS 6846(113)	6.56	5.55	9.323E-04	.0801	1.137E-03	.0977	1.277E-03	.1098	2.949E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

NASA-RI 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA52E

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
3	1	7.90	106.4	1272	29.96	.03	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.517	3760	1.052E-05	7.594E-08	5.208E 05	1.163E-02	3.709E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	77	.0486	4.900E-02	4.5176E-02
OP SIDE(OS)	7386	113	77	.0486	4.900E-02	4.5176E-02
BOTTOM(BOT)	7514	113	77	.0486	4.900E-02	4.5176E-02
TOP(TOP)	8436	113	77	.0486	4.900E-02	4.5176E-02

PIC NO	TIME	DELTIME	S(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5347(113)	7.63	6.62	8.532E-04	.0733	1.040E-03	.0893	1.169E-03	.1004	2.694E-03
OS 147(113)	7.63	6.62	8.532E-04	.0733	1.040E-03	.0893	1.169E-03	.1004	2.694E-03
BOT 2447(113)	7.63	6.62	8.532E-04	.0733	1.040E-03	.0893	1.169E-03	.1004	2.694E-03
NOS 6847(113)	7.63	6.62	8.532E-04	.0733	1.040E-03	.0893	1.169E-03	.1004	2.694E-03
TOP 5348(113)	8.74	7.72	7.900E-04	.0678	9.631E-04	.0827	1.082E-03	.0929	2.494E-03
OS 148(113)	8.74	7.72	7.900E-04	.0678	9.631E-04	.0827	1.082E-03	.0929	2.494E-03
BOT 2448(113)	8.74	7.72	7.900E-04	.0678	9.631E-04	.0827	1.082E-03	.0929	2.494E-03
NOS 6848(113)	8.74	7.72	7.900E-04	.0678	9.631E-04	.0827	1.082E-03	.0929	2.494E-03
TOP 5349(113)	9.84	8.82	7.391E-04	.0635	9.010E-04	.0774	1.012E-03	.0870	2.334E-03
OS 149(113)	9.84	8.82	7.391E-04	.0635	9.010E-04	.0774	1.012E-03	.0870	2.334E-03
BOT 2449(113)	9.84	8.82	7.391E-04	.0635	9.010E-04	.0774	1.012E-03	.0870	2.334E-03
NOS 6849(113)	9.84	8.82	7.391E-04	.0635	9.010E-04	.0774	1.012E-03	.0870	2.334E-03
BOT 2450(113)	10.91	9.90	6.978E-04	.0599	8.507E-04	.0731	9.558E-04	.0821	2.203E-03
TOP 5350(113)	10.94	9.93	6.969E-04	.0598	8.496E-04	.0729	9.546E-04	.0819	2.198E-03
OS 150(113)	10.94	9.93	6.969E-04	.0598	8.496E-04	.0729	9.546E-04	.0819	2.198E-03
NOS 6850(113)	10.94	9.93	6.969E-04	.0598	8.496E-04	.0729	9.546E-04	.0819	2.198E-03
TOP 5351(113)	12.01	11.00	6.619E-04	.0568	8.070E-04	.0693	9.067E-04	.0778	2.088E-03
OS 151(113)	12.01	11.00	6.619E-04	.0568	8.070E-04	.0693	9.067E-04	.0778	2.088E-03
BOT 2451(113)	12.01	11.00	6.619E-04	.0568	8.070E-04	.0693	9.067E-04	.0778	2.088E-03
NOS 6851(113)	12.01	11.00	6.619E-04	.0568	8.070E-04	.0693	9.067E-04	.0778	2.088E-03
TOP 5352(113)	13.12	12.10	6.311E-04	.0542	7.694E-04	.0660	8.645E-04	.0742	1.991E-03
OS 152(113)	13.12	12.10	6.311E-04	.0542	7.694E-04	.0660	8.645E-04	.0742	1.991E-03
BOT 2452(113)	13.12	12.10	6.311E-04	.0542	7.694E-04	.0660	8.645E-04	.0742	1.991E-03
NOS 6852(113)	13.12	12.10	6.311E-04	.0542	7.694E-04	.0660	8.645E-04	.0742	1.991E-03
TOP 5353(113)	14.22	13.20	6.042E-04	.0519	7.366E-04	.0632	8.277E-04	.0710	1.906E-03
OS 153(113)	14.22	13.20	6.042E-04	.0519	7.366E-04	.0632	8.277E-04	.0710	1.906E-03
BOT 2453(113)	14.22	13.20	6.042E-04	.0519	7.366E-04	.0632	8.277E-04	.0710	1.906E-03
NOS 6853(113)	14.22	13.20	6.042E-04	.0519	7.366E-04	.0632	8.277E-04	.0710	1.906E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
3	1	7.90	106.7	1272	29.96	.03	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.518	3760	1.055E-05	7.595E-08	5.222E 05	1.165E-02	3.704E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	77	.0486	4.900E-02	4.5176E-02
UP SIDE(OS)	7386	113	77	.0486	4.900E-02	4.5176E-02
BOTTOM(BOT)	7514	113	77	.0486	4.900E-02	4.5176E-02
TOP(TOP)	8436	113	77	.0486	4.900E-02	4.5176E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
OS 154(113)	15.29	14.28	5.810E-04	.0499	7.083E-04	.0608	7.959E-04	.0683	1.833E-03
BOT 2454(113)	15.29	14.28	5.810E-04	.0499	7.083E-04	.0608	7.959E-04	.0683	1.833E-03
NOS 6854(113)	15.29	14.28	5.810E-04	.0499	7.083E-04	.0608	7.959E-04	.0683	1.833E-03
TOP 8354(113)	15.32	14.31	5.805E-04	.0498	7.077E-04	.0607	7.952E-04	.0682	1.829E-03
TOP 8355(113)	16.39	15.38	5.598E-04	.0481	6.825E-04	.0586	7.668E-04	.0658	1.766E-03
OS 155(113)	16.39	15.38	5.598E-04	.0481	6.825E-04	.0586	7.668E-04	.0658	1.766E-03
BOT 2455(113)	16.39	15.38	5.598E-04	.0481	6.825E-04	.0586	7.668E-04	.0658	1.766E-03
NOS 6855(113)	16.39	15.38	5.598E-04	.0481	6.825E-04	.0586	7.668E-04	.0658	1.766E-03
TOP 8356(113)	17.50	16.48	5.408E-04	.0464	6.593E-04	.0566	7.408E-04	.0636	1.704E-03
OS 156(113)	17.50	16.48	5.408E-04	.0464	6.593E-04	.0566	7.408E-04	.0636	1.704E-03
BOT 2456(113)	17.50	16.48	5.408E-04	.0464	6.593E-04	.0566	7.408E-04	.0636	1.704E-03
NOS 6856(113)	17.50	16.48	5.408E-04	.0464	6.593E-04	.0566	7.408E-04	.0636	1.704E-03
TOP 8357(113)	18.57	17.56	5.239E-04	.0450	6.387E-04	.0548	7.177E-04	.0616	1.651E-03
OS 157(113)	18.57	17.56	5.239E-04	.0450	6.387E-04	.0548	7.177E-04	.0616	1.651E-03
BOT 2457(113)	18.57	17.56	5.239E-04	.0450	6.387E-04	.0548	7.177E-04	.0616	1.651E-03
NOS 6857(113)	18.57	17.56	5.239E-04	.0450	6.387E-04	.0548	7.177E-04	.0616	1.651E-03
TOP 8358(113)	19.67	18.66	5.082E-04	.0436	6.196E-04	.0531	6.962E-04	.0597	1.600E-03
OS 158(113)	19.67	18.66	5.082E-04	.0436	6.196E-04	.0531	6.962E-04	.0597	1.600E-03
BOT 2458(113)	19.67	18.66	5.082E-04	.0436	6.196E-04	.0531	6.962E-04	.0597	1.600E-03
NOS 6858(113)	19.67	18.66	5.082E-04	.0436	6.196E-04	.0531	6.962E-04	.0597	1.600E-03
TOP 8359(113)	20.77	19.76	4.939E-04	.0424	6.021E-04	.0517	6.765E-04	.0580	1.557E-03
OS 159(113)	20.77	19.76	4.939E-04	.0424	6.021E-04	.0517	6.765E-04	.0580	1.557E-03
BOT 2459(113)	20.77	19.76	4.939E-04	.0424	6.021E-04	.0517	6.765E-04	.0580	1.557E-03
NOS 6859(113)	20.77	19.76	4.939E-04	.0424	6.021E-04	.0517	6.765E-04	.0580	1.557E-03
BOT 2460(113)	21.85	20.84	4.810E-04	.0412	5.863E-04	.0503	6.588E-04	.0565	1.514E-03

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
3	1	7.90	106.9	1272	29.96	.03	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.012	.519	3766	1.057E-05	7.596E-08	5.231E 05	1.166E-02	3.701E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	77	.0486	4.900E-02	4.5176E-02
UP SIDE(US)	7386	113	77	.0486	4.900E-02	4.5176E-02
BOTTOM(BOT)	7514	113	77	.0486	4.900E-02	4.5176E-02
TOP(TOP)	8436	113	77	.0486	4.900E-02	4.5176E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5360(113)	21.88	20.96	4.407E-04	.0412	5.860E-04	.0503	6.584E-04	.0565	1.514E-03
US 160(113)	21.88	20.96	4.407E-04	.0412	5.860E-04	.0503	6.584E-04	.0565	1.514E-03
NOS 6860(113)	21.88	20.96	4.407E-04	.0412	5.860E-04	.0503	6.584E-04	.0565	1.514E-03
TOP 5361(113)	22.95	21.94	4.287E-04	.0402	5.714E-04	.0490	6.421E-04	.0551	1.476E-03
US 161(113)	22.95	21.94	4.287E-04	.0402	5.714E-04	.0490	6.421E-04	.0551	1.476E-03
HOT 2461(113)	22.95	21.94	4.287E-04	.0402	5.714E-04	.0490	6.421E-04	.0551	1.476E-03
NOS 6861(113)	22.95	21.94	4.287E-04	.0402	5.714E-04	.0490	6.421E-04	.0551	1.476E-03
TOP 5362(113)	24.05	23.04	4.174E-04	.0392	5.576E-04	.0478	6.266E-04	.0537	1.440E-03
US 162(113)	24.05	23.04	4.174E-04	.0392	5.576E-04	.0478	6.266E-04	.0537	1.440E-03
HOT 2462(113)	24.05	23.04	4.174E-04	.0392	5.576E-04	.0478	6.266E-04	.0537	1.440E-03
NOS 6862(113)	24.05	23.04	4.174E-04	.0392	5.576E-04	.0478	6.266E-04	.0537	1.440E-03
HOT 2463(113)	25.13	24.12	4.071E-04	.0384	5.450E-04	.0468	6.124E-04	.0525	1.409E-03
TOP 5363(113)	25.15	24.14	4.068E-04	.0383	5.448E-04	.0467	6.121E-04	.0525	1.406E-03
US 163(113)	25.15	24.14	4.068E-04	.0383	5.448E-04	.0467	6.121E-04	.0525	1.406E-03
NOS 6863(113)	25.15	24.14	4.068E-04	.0383	5.448E-04	.0467	6.121E-04	.0525	1.406E-03
TOP 5364(113)	26.23	25.22	4.372E-04	.0375	5.330E-04	.0457	5.989E-04	.0514	1.377E-03
US 164(113)	26.23	25.22	4.372E-04	.0375	5.330E-04	.0457	5.989E-04	.0514	1.377E-03
HOT 2464(113)	26.23	25.22	4.372E-04	.0375	5.330E-04	.0457	5.989E-04	.0514	1.377E-03
NOS 6864(113)	26.23	25.22	4.372E-04	.0375	5.330E-04	.0457	5.989E-04	.0514	1.377E-03
TOP 5365(113)	27.33	26.32	4.280E-04	.0367	5.217E-04	.0447	5.862E-04	.0503	1.348E-03
US 165(113)	27.33	26.32	4.280E-04	.0367	5.217E-04	.0447	5.862E-04	.0503	1.348E-03
HOT 2465(113)	27.33	26.32	4.280E-04	.0367	5.217E-04	.0447	5.862E-04	.0503	1.348E-03
NOS 6865(113)	27.33	26.32	4.280E-04	.0367	5.217E-04	.0447	5.862E-04	.0503	1.348E-03
HOT 2466(113)	28.41	27.40	4.195E-04	.0360	5.114E-04	.0438	5.746E-04	.0493	1.320E-03
TOP 5366(113)	28.43	27.42	4.193E-04	.0360	5.111E-04	.0438	5.743E-04	.0493	1.320E-03
US 166(113)	28.43	27.42	4.193E-04	.0360	5.111E-04	.0438	5.743E-04	.0493	1.320E-03
NOS 6866(113)	28.43	27.42	4.193E-04	.0360	5.111E-04	.0438	5.743E-04	.0493	1.320E-03

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3/29/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
3	1	7.90	106.9	1272	29.96	.03	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.012	.519	3760	1.057E-05	7.596E-08	5.231E 05	1.166E-02	3.701E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	77	.0486	4.900E-02	4.5176E-02
OP SIDE(OS)	7386	113	77	.0486	4.900E-02	4.5176E-02
BOTTOM(BOT)	7514	113	77	.0486	4.900E-02	4.5176E-02
TOP(TOP)	8436	113	77	.0486	4.900E-02	4.5176E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5367(113)	29.51	28.50	4.113E-04	.0353	5.014E-04	.0430	5.634E-04	.0483	1.294E-03
OS 167(113)	29.51	28.50	4.113E-04	.0353	5.014E-04	.0430	5.634E-04	.0483	1.294E-03
BOT 2467(113)	29.51	28.50	4.113E-04	.0353	5.014E-04	.0430	5.634E-04	.0483	1.294E-03
NOS 6867(113)	29.51	28.50	4.113E-04	.0353	5.014E-04	.0430	5.634E-04	.0483	1.294E-03
TOP 5368(113)	30.61	29.60	4.036E-04	.0346	4.920E-04	.0422	5.528E-04	.0474	1.270E-03
OS 168(113)	30.61	29.60	4.036E-04	.0346	4.920E-04	.0422	5.528E-04	.0474	1.270E-03
BOT 2468(113)	30.61	29.60	4.036E-04	.0346	4.920E-04	.0422	5.528E-04	.0474	1.270E-03
NOS 6868(113)	30.61	29.60	4.036E-04	.0346	4.920E-04	.0422	5.528E-04	.0474	1.270E-03
TOP 5369(113)	31.69	30.67	3.964E-04	.0340	4.833E-04	.0414	5.430E-04	.0465	1.247E-03
OS 169(113)	31.71	30.70	3.963E-04	.0340	4.831E-04	.0414	5.428E-04	.0465	1.246E-03
BOT 2469(113)	31.71	30.70	3.963E-04	.0340	4.831E-04	.0414	5.428E-04	.0465	1.246E-03
NOS 6869(113)	31.71	30.70	3.963E-04	.0340	4.831E-04	.0414	5.428E-04	.0465	1.246E-03
TOP 5370(113)	32.79	31.78	3.895E-04	.0334	4.748E-04	.0407	5.335E-04	.0457	1.225E-03
OS 170(113)	32.79	31.78	3.895E-04	.0334	4.748E-04	.0407	5.335E-04	.0457	1.225E-03
BOT 2470(113)	32.79	31.78	3.895E-04	.0334	4.748E-04	.0407	5.335E-04	.0457	1.225E-03
NOS 6870(113)	32.79	31.78	3.895E-04	.0334	4.748E-04	.0407	5.335E-04	.0457	1.225E-03
TOP 5371(113)	33.89	32.88	3.829E-04	.0328	4.668E-04	.0400	5.245E-04	.0449	1.203E-03
OS 171(113)	33.89	32.88	3.829E-04	.0328	4.668E-04	.0400	5.245E-04	.0449	1.203E-03
BOT 2471(113)	33.89	32.88	3.829E-04	.0328	4.668E-04	.0400	5.245E-04	.0449	1.203E-03
NOS 6871(113)	33.89	32.88	3.829E-04	.0328	4.668E-04	.0400	5.245E-04	.0449	1.203E-03
TOP 5372(113)	34.99	33.98	3.766E-04	.0323	4.592E-04	.0393	5.160E-04	.0442	1.184E-03
OS 172(113)	34.99	33.98	3.766E-04	.0323	4.592E-04	.0393	5.160E-04	.0442	1.184E-03
BOT 2472(113)	34.99	33.98	3.766E-04	.0323	4.592E-04	.0393	5.160E-04	.0442	1.184E-03
NOS 6872(113)	34.99	33.98	3.766E-04	.0323	4.592E-04	.0393	5.160E-04	.0442	1.184E-03
TOP 5373(113)	36.07	35.05	3.708E-04	.0318	4.521E-04	.0388	5.080E-04	.0436	1.168E-03
BOT 2473(113)	36.07	35.05	3.708E-04	.0318	4.521E-04	.0388	5.080E-04	.0436	1.168E-03
NOS 6873(113)	36.07	35.05	3.708E-04	.0318	4.521E-04	.0388	5.080E-04	.0436	1.168E-03

****
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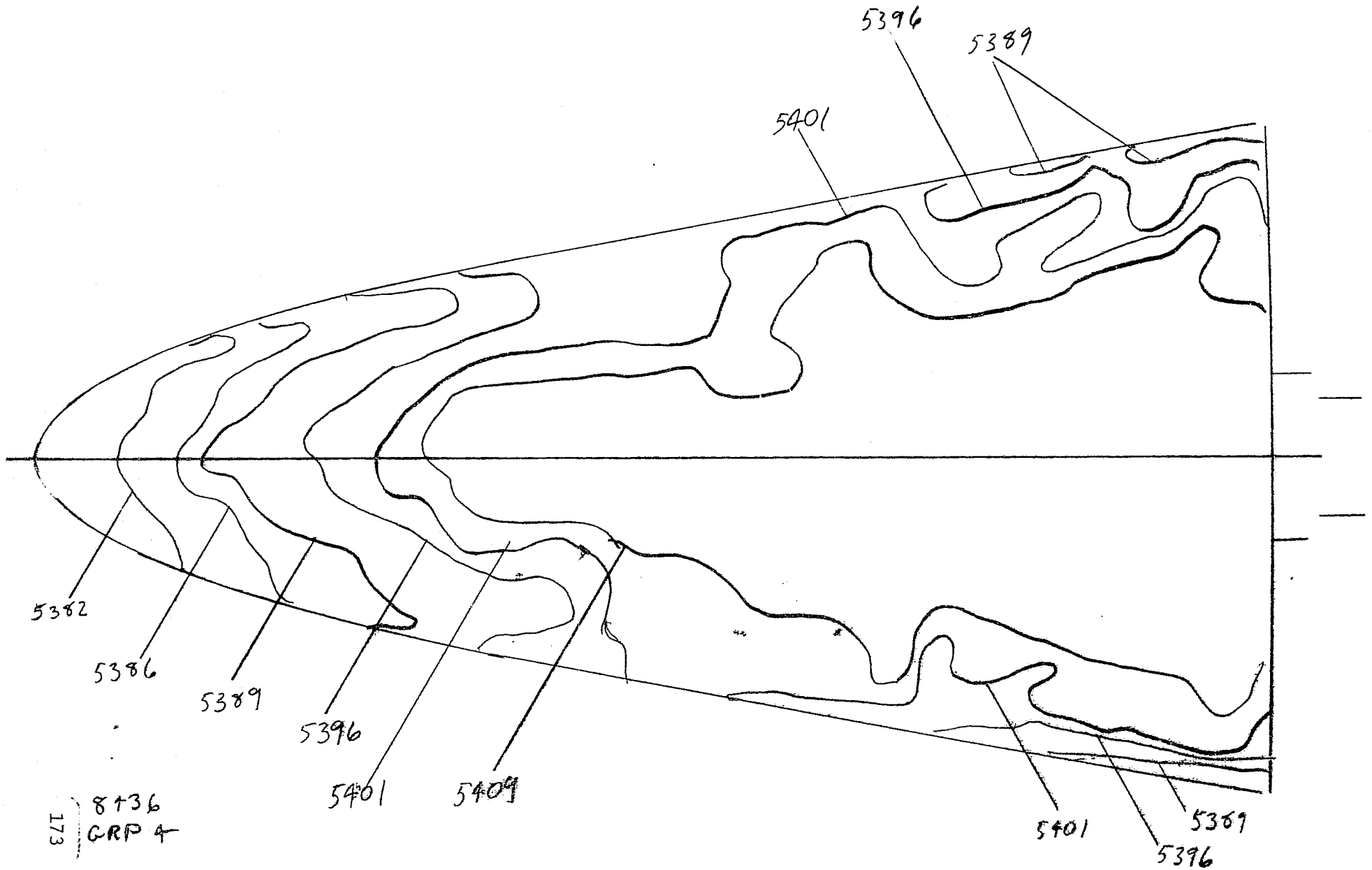
NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
3	1	7.90	106.9	1272	29.96	.03	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.515	3760	1.057E-05	7.596E-08	5.231E 05	1.166E-02	3.701E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	77	.0486	4.900E-02	4.5176E-02
OP SIDE(OS)	7386	113	77	.0486	4.900E-02	4.5176E-02
BOTTOM(BOT)	7514	113	77	.0486	4.900E-02	4.5176E-02
TOP(TOP)	8436	113	77	.0486	4.900E-02	4.5176E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
OS 173(113)	36.09	35.98	3.707E-04	.0318	4.519E-04	.0387	5.078E-04	.0435	1.165E-03
TOP 5374(113)	37.17	36.16	3.651E-04	.0313	4.451E-04	.0382	5.002E-04	.0429	1.149E-03
OS 174(113)	37.17	36.16	3.651E-04	.0313	4.451E-04	.0382	5.002E-04	.0429	1.149E-03
NOT 2474(113)	37.17	36.16	3.651E-04	.0313	4.451E-04	.0382	5.002E-04	.0429	1.149E-03
NOS 6874(113)	37.17	36.16	3.651E-04	.0313	4.451E-04	.0382	5.002E-04	.0429	1.149E-03
TOP 5375(113)	38.27	37.26	3.597E-04	.0308	4.385E-04	.0376	4.927E-04	.0423	1.133E-03
OS 175(113)	38.27	37.26	3.597E-04	.0308	4.385E-04	.0376	4.927E-04	.0423	1.133E-03
NOT 2475(113)	38.27	37.26	3.597E-04	.0308	4.385E-04	.0376	4.927E-04	.0423	1.133E-03
NOS 6875(113)	38.27	37.26	3.597E-04	.0308	4.385E-04	.0376	4.927E-04	.0423	1.133E-03
	38.72		MODEL HAS LEFT CENTERLINE						
NOT 2476(113)	39.35	38.33	3.546E-04	.0304	4.323E-04	.0370	4.858E-04	.0416	1.114E-03
TOP 5376(113)	39.37	38.36	3.545E-04	.0304	4.322E-04	.0370	4.856E-04	.0416	1.115E-03
OS 176(113)	39.37	38.36	3.545E-04	.0304	4.322E-04	.0370	4.856E-04	.0416	1.115E-03
NOS 6876(113)	39.37	38.36	3.545E-04	.0304	4.322E-04	.0370	4.856E-04	.0416	1.115E-03



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AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
4	1	7.90	107.3	1271	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.521	3754	1.0A1E-05	7.592E-08	5.255E 05	1.168E-02	3.693E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXX)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7610	150	79	.0505	0	0
UP SIDE(OS)	7386	150	79	.0505	0	0
BOTTOM(BOT)	7514	150	79	.0505	0	0
TOP(TOP)	8436	150	79	.0505	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 5377(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 177(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 2477(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 6877(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 5378(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 178(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 2478(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 6878(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.63								
TOP 5379(150)	2.18	1.15	4.382E-03	.3748	5.397E-03	.4616	6.105E-03	.5222	1.369E-02
OS 179(150)	2.18	1.15	4.382E-03	.3748	5.397E-03	.4616	6.105E-03	.5222	1.369E-02
HOT 2479(150)	2.18	1.15	4.382E-03	.3748	5.397E-03	.4616	6.105E-03	.5222	1.369E-02
NOS 6879(150)	2.18	1.15	4.382E-03	.3748	5.397E-03	.4616	6.105E-03	.5222	1.369E-02
TOP 5380(150)	3.28	2.25	3.133E-03	.2680	3.859E-03	.3300	4.365E-03	.3733	9.788E-03
OS 180(150)	3.28	2.25	3.133E-03	.2680	3.859E-03	.3300	4.365E-03	.3733	9.788E-03
HOT 2480(150)	3.28	2.25	3.133E-03	.2680	3.859E-03	.3300	4.365E-03	.3733	9.788E-03
NOS 6880(150)	3.28	2.25	3.133E-03	.2680	3.859E-03	.3300	4.365E-03	.3733	9.788E-03
TOP 5381(150)	4.36	3.33	2.577E-03	.2205	3.174E-03	.2716	3.591E-03	.3073	8.059E-03
OS 181(150)	4.36	3.33	2.577E-03	.2205	3.174E-03	.2716	3.591E-03	.3073	8.059E-03
HOT 2481(150)	4.36	3.33	2.577E-03	.2205	3.174E-03	.2716	3.591E-03	.3073	8.059E-03
NOS 6881(150)	4.36	3.33	2.577E-03	.2205	3.174E-03	.2716	3.591E-03	.3073	8.059E-03
TOP 5382(150)	5.46	4.43	2.234E-03	.1911	2.752E-03	.2354	3.113E-03	.2662	6.980E-03
OS 182(150)	5.46	4.43	2.234E-03	.1911	2.752E-03	.2354	3.113E-03	.2662	6.980E-03
HOT 2482(150)	5.46	4.43	2.234E-03	.1911	2.752E-03	.2354	3.113E-03	.2662	6.980E-03
NOS 6882(150)	5.46	4.43	2.234E-03	.1911	2.752E-03	.2354	3.113E-03	.2662	6.980E-03
TOP 5383(150)	6.56	5.53	2.000E-03	.1710	2.463E-03	.2106	2.786E-03	.2383	6.247E-03
OS 183(150)	6.56	5.53	2.000E-03	.1710	2.463E-03	.2106	2.786E-03	.2383	6.247E-03
HOT 2483(150)	6.56	5.53	2.000E-03	.1710	2.463E-03	.2106	2.786E-03	.2383	6.247E-03
NOS 6883(150)	6.56	5.53	2.000E-03	.1710	2.463E-03	.2106	2.786E-03	.2383	6.247E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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NASA-RI OH50

VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
4	1	7.90	107.5	1271	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.522	3759	1.063E-05	7.592E-08	5.265E 05	1.169E-02	3.689E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	150	79	.0505	9.696E-02	9.3126E-02
UP SIDE(US)	7386	150	79	.0505	9.696E-02	9.3126E-02
BOTTOM(BOT)	7514	150	79	.0505	9.696E-02	9.3126E-02
TOP(TOP)	8436	150	79	.0505	9.696E-02	9.3126E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
HOT 2484(150)	7.63	6.41	1.829E-03	.1564	2.253E-03	.1926	2.549E-03	.2179	5.710E-03
TOP 5384(150)	7.66	6.43	1.826E-03	.1562	2.249E-03	.1923	2.544E-03	.2176	5.705E-03
US 184(150)	7.66	6.43	1.826E-03	.1562	2.249E-03	.1923	2.544E-03	.2176	5.705E-03
NOS 6884(150)	7.66	6.43	1.826E-03	.1562	2.249E-03	.1923	2.544E-03	.2176	5.705E-03
TOP 5385(150)	8.74	7.71	1.694E-03	.1448	2.086E-03	.1783	2.360E-03	.2017	5.287E-03
US 185(150)	8.74	7.71	1.694E-03	.1448	2.086E-03	.1783	2.360E-03	.2017	5.287E-03
HOT 2485(150)	8.74	7.71	1.694E-03	.1448	2.086E-03	.1783	2.360E-03	.2017	5.287E-03
NOS 6885(150)	8.74	7.71	1.694E-03	.1448	2.086E-03	.1783	2.360E-03	.2017	5.287E-03
TOP 5386(150)	9.84	8.81	1.584E-03	.1354	1.951E-03	.1668	2.207E-03	.1887	4.945E-03
US 186(150)	9.84	8.81	1.584E-03	.1354	1.951E-03	.1668	2.207E-03	.1887	4.945E-03
HOT 2486(150)	9.84	8.81	1.584E-03	.1354	1.951E-03	.1668	2.207E-03	.1887	4.945E-03
NOS 6886(150)	9.84	8.81	1.584E-03	.1354	1.951E-03	.1668	2.207E-03	.1887	4.945E-03
HOT 2487(150)	10.91	9.89	1.496E-03	.1278	1.842E-03	.1574	2.064E-03	.1780	4.664E-03
TOP 5387(150)	10.94	9.91	1.494E-03	.1277	1.840E-03	.1573	2.061E-03	.1779	4.662E-03
US 187(150)	10.94	9.91	1.494E-03	.1277	1.840E-03	.1573	2.081E-03	.1779	4.662E-03
NOS 6887(150)	10.94	9.91	1.494E-03	.1277	1.840E-03	.1573	2.081E-03	.1779	4.662E-03
TOP 5388(150)	12.01	10.99	1.419E-03	.1212	1.747E-03	.1492	1.977E-03	.1688	4.420E-03
US 188(150)	12.01	10.99	1.419E-03	.1212	1.747E-03	.1492	1.977E-03	.1688	4.420E-03
HOT 2488(150)	12.01	10.99	1.419E-03	.1212	1.747E-03	.1492	1.977E-03	.1688	4.420E-03
NOS 6888(150)	12.01	10.99	1.419E-03	.1212	1.747E-03	.1492	1.977E-03	.1688	4.420E-03
TOP 5389(150)	13.12	12.09	1.353E-03	.1155	1.666E-03	.1423	1.884E-03	.1609	4.214E-03
US 189(150)	13.12	12.09	1.353E-03	.1155	1.666E-03	.1423	1.884E-03	.1609	4.214E-03
HOT 2489(150)	13.12	12.09	1.353E-03	.1155	1.666E-03	.1423	1.884E-03	.1609	4.214E-03
NOS 6889(150)	13.12	12.09	1.353E-03	.1155	1.666E-03	.1423	1.884E-03	.1609	4.214E-03
TOP 5390(150)	14.22	13.19	1.295E-03	.1106	1.595E-03	.1362	1.804E-03	.1541	4.034E-03
US 190(150)	14.22	13.19	1.295E-03	.1106	1.595E-03	.1362	1.804E-03	.1541	4.034E-03
HOT 2490(150)	14.22	13.19	1.295E-03	.1106	1.595E-03	.1362	1.804E-03	.1541	4.034E-03
NOS 6890(150)	14.22	13.19	1.295E-03	.1106	1.595E-03	.1362	1.804E-03	.1541	4.034E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
4	1	7.90	107.8	1272	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.524	3759	1.066E-05	7.594E-08	5.278E 05	1.171E-02	3.684E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7610	150	79	.0505	9.696E-02	9.3126E-02
UP SIDE(US)	7386	150	79	.0505	9.696E-02	9.3126E-02
BOTTOM(BOT)	7514	150	79	.0505	9.696E-02	9.3126E-02
TOP(TOP)	8436	150	79	.0505	9.696E-02	9.3126E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
HOT 2491(150)	15.29	14.27	1.245E-03	.1063	1.534E-03	.1310	1.735E-03	.1481	3.879E-03
TOP 5391(150)	15.32	14.29	1.244E-03	.1062	1.532E-03	.1308	1.733E-03	.1480	3.876E-03
US 191(150)	15.32	14.29	1.244E-03	.1062	1.532E-03	.1308	1.733E-03	.1480	3.876E-03
NOS 6891(150)	15.32	14.29	1.244E-03	.1062	1.532E-03	.1308	1.733E-03	.1480	3.876E-03
TOP 5392(150)	16.39	15.37	1.200E-03	.1024	1.478E-03	.1261	1.671E-03	.1427	3.734E-03
US 192(150)	16.39	15.37	1.200E-03	.1024	1.478E-03	.1261	1.671E-03	.1427	3.734E-03
HOT 2492(150)	16.39	15.37	1.200E-03	.1024	1.478E-03	.1261	1.671E-03	.1427	3.734E-03
NOS 6892(150)	16.39	15.37	1.200E-03	.1024	1.478E-03	.1261	1.671E-03	.1427	3.734E-03
TOP 5393(150)	17.50	16.47	1.159E-03	.0989	1.427E-03	.1218	1.615E-03	.1378	3.607E-03
US 193(150)	17.50	16.47	1.159E-03	.0989	1.427E-03	.1218	1.615E-03	.1378	3.607E-03
HOT 2493(150)	17.50	16.47	1.159E-03	.0989	1.427E-03	.1218	1.615E-03	.1378	3.607E-03
NOS 6893(150)	17.50	16.47	1.159E-03	.0989	1.427E-03	.1218	1.615E-03	.1378	3.607E-03
TOP 5394(150)	18.60	17.57	1.122E-03	.0958	1.382E-03	.1180	1.563E-03	.1334	3.492E-03
US 194(150)	18.60	17.57	1.122E-03	.0958	1.382E-03	.1180	1.563E-03	.1334	3.492E-03
HOT 2494(150)	18.60	17.57	1.122E-03	.0958	1.382E-03	.1180	1.563E-03	.1334	3.492E-03
NOS 6894(150)	18.60	17.57	1.122E-03	.0958	1.382E-03	.1180	1.563E-03	.1334	3.492E-03
HOT 2495(150)	19.67	18.65	1.089E-03	.0930	1.341E-03	.1146	1.517E-03	.1296	3.393E-03
TOP 5395(150)	19.70	18.67	1.088E-03	.0929	1.340E-03	.1144	1.516E-03	.1294	3.385E-03
US 195(150)	19.70	18.67	1.088E-03	.0929	1.340E-03	.1144	1.516E-03	.1294	3.385E-03
NOS 6895(150)	19.70	18.67	1.088E-03	.0929	1.340E-03	.1144	1.516E-03	.1294	3.385E-03
TOP 5396(150)	20.77	19.75	1.058E-03	.0903	1.303E-03	.1113	1.474E-03	.1259	3.294E-03
US 196(150)	20.77	19.75	1.058E-03	.0903	1.303E-03	.1113	1.474E-03	.1259	3.294E-03
HOT 2496(150)	20.77	19.75	1.058E-03	.0903	1.303E-03	.1113	1.474E-03	.1259	3.294E-03
NOS 6896(150)	20.77	19.75	1.058E-03	.0903	1.303E-03	.1113	1.474E-03	.1259	3.294E-03
TOP 5397(150)	21.88	20.85	1.030E-03	.0879	1.269E-03	.1083	1.435E-03	.1225	3.206E-03
US 197(150)	21.88	20.85	1.030E-03	.0879	1.269E-03	.1083	1.435E-03	.1225	3.206E-03
HOT 2497(150)	21.88	20.85	1.030E-03	.0879	1.269E-03	.1083	1.435E-03	.1225	3.206E-03
NOS 6897(150)	21.88	20.85	1.030E-03	.0879	1.269E-03	.1083	1.435E-03	.1225	3.206E-03

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VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
4	1	7.90	107.9	1272	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.524	3759	1.067E-05	7.594E-08	5.283E 05	1.171E-02	3.683E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7610	150	79	.0505	9.696E-02	9.3126E-02
UP SIDE(OS)	7386	150	79	.0505	9.696E-02	9.3126E-02
HOTICM(BOT)	7514	150	79	.0505	9.696E-02	9.3126E-02
TOP(TOP)	8436	150	79	.0505	9.696E-02	9.3126E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
OS 198(150)	22.95	21.93	1.004E-03	.0857	1.237E-03	.1055	1.399E-03	.1194	3.123E-03
TOP 5398(150)	22.98	21.95	1.004E-03	.0856	1.236E-03	.1055	1.399E-03	.1193	3.122E-03
HOT 2498(150)	22.98	21.95	1.004E-03	.0856	1.236E-03	.1055	1.399E-03	.1193	3.122E-03
NOS 6898(150)	22.98	21.95	1.004E-03	.0856	1.236E-03	.1055	1.399E-03	.1193	3.122E-03
TOP 5399(150)	24.05	23.03	9.800E-04	.0836	1.207E-03	.1030	1.365E-03	.1165	3.048E-03
OS 199(150)	24.05	23.03	9.800E-04	.0836	1.207E-03	.1030	1.365E-03	.1165	3.048E-03
HOT 2499(150)	24.05	23.03	9.800E-04	.0836	1.207E-03	.1030	1.365E-03	.1165	3.048E-03
NOS 6899(150)	24.05	23.03	9.800E-04	.0836	1.207E-03	.1030	1.365E-03	.1165	3.048E-03
TOP 5400(150)	25.15	24.13	9.574E-04	.0817	1.179E-03	.1006	1.334E-03	.1138	2.977E-03
OS 200(150)	25.15	24.13	9.574E-04	.0817	1.179E-03	.1006	1.334E-03	.1138	2.977E-03
HOT 2500(150)	25.15	24.13	9.574E-04	.0817	1.179E-03	.1006	1.334E-03	.1138	2.977E-03
NOS 6900(150)	25.15	24.13	9.574E-04	.0817	1.179E-03	.1006	1.334E-03	.1138	2.977E-03
TOP 5401(150)	26.26	25.23	9.363E-04	.0799	1.153E-03	.0984	1.304E-03	.1113	2.912E-03
OS 201(150)	26.26	25.23	9.363E-04	.0799	1.153E-03	.0984	1.304E-03	.1113	2.912E-03
HOT 2501(150)	26.26	25.23	9.363E-04	.0799	1.153E-03	.0984	1.304E-03	.1113	2.912E-03
NOS 6901(150)	26.26	25.23	9.363E-04	.0799	1.153E-03	.0984	1.304E-03	.1113	2.912E-03
HOT 2502(150)	27.36	26.33	9.165E-04	.0782	1.129E-03	.0963	1.278E-03	.1089	2.849E-03
TOP 5402(150)	27.36	26.33	9.165E-04	.0782	1.129E-03	.0964	1.277E-03	.1090	2.853E-03
OS 202(150)	27.36	26.33	9.165E-04	.0782	1.129E-03	.0964	1.277E-03	.1090	2.853E-03
NOS 6902(150)	27.36	26.33	9.165E-04	.0782	1.129E-03	.0964	1.277E-03	.1090	2.853E-03
TOP 5403(150)	28.43	27.41	8.983E-04	.0766	1.106E-03	.0943	1.252E-03	.1067	2.789E-03
OS 203(150)	28.43	27.41	8.983E-04	.0766	1.106E-03	.0943	1.252E-03	.1067	2.789E-03
HOT 2503(150)	28.43	27.41	8.983E-04	.0766	1.106E-03	.0943	1.252E-03	.1067	2.789E-03
NOS 6903(150)	28.43	27.41	8.983E-04	.0766	1.106E-03	.0943	1.252E-03	.1067	2.789E-03
TOP 5404(150)	29.53	28.51	8.808E-04	.0751	1.085E-03	.0925	1.227E-03	.1046	2.734E-03
OS 204(150)	29.53	28.51	8.808E-04	.0751	1.085E-03	.0925	1.227E-03	.1046	2.734E-03
HOT 2504(150)	29.53	28.51	8.808E-04	.0751	1.085E-03	.0925	1.227E-03	.1046	2.734E-03
NOS 6904(150)	29.53	28.51	8.808E-04	.0751	1.085E-03	.0925	1.227E-03	.1046	2.734E-03

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NASA-RI 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
4	1	7.90	108.2	1272	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.526	3759	1.070E-05	7.594E-08	5.298E 05	1.173E-02	3.678E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7610	150	79	.0505	9.696E-02	9.3126E-02
OP SIDE(OS)	7386	150	79	.0505	9.696E-02	9.3126E-02
HOTTOM(BOT)	7514	150	79	.0505	9.696E-02	9.3126E-02
TOP(TOP)	8436	150	79	.0505	9.696E-02	9.3126E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
HOT 2505(150)	30.61	29.58	8.646E-04	.0737	1.065E-03	.0908	1.205E-03	.1027	2.686E-03
TOP 5405(150)	30.64	29.61	8.643E-04	.0737	1.064E-03	.0908	1.204E-03	.1027	2.685E-03
OS 205(150)	30.64	29.61	8.643E-04	.0737	1.064E-03	.0908	1.204E-03	.1027	2.685E-03
NOS 6905(150)	30.64	29.61	8.643E-04	.0737	1.064E-03	.0908	1.204E-03	.1027	2.685E-03
TOP 5406(150)	31.71	30.69	8.490E-04	.0724	1.046E-03	.0891	1.183E-03	.1008	2.635E-03
OS 206(150)	31.71	30.69	8.490E-04	.0724	1.046E-03	.0891	1.183E-03	.1008	2.635E-03
HOT 2506(150)	31.71	30.69	8.490E-04	.0724	1.046E-03	.0891	1.183E-03	.1008	2.635E-03
NOS 6906(150)	31.74	30.71	8.486E-04	.0724	1.045E-03	.0891	1.182E-03	.1008	2.637E-03
TOP 5407(150)	32.81	31.79	8.341E-04	.0711	1.027E-03	.0876	1.162E-03	.0991	2.589E-03
OS 207(150)	32.81	31.79	8.341E-04	.0711	1.027E-03	.0876	1.162E-03	.0991	2.589E-03
HOT 2507(150)	32.81	31.79	8.341E-04	.0711	1.027E-03	.0876	1.162E-03	.0991	2.589E-03
NOS 6907(150)	32.81	31.79	8.341E-04	.0711	1.027E-03	.0876	1.162E-03	.0991	2.589E-03
TOP 5408(150)	33.91	32.89	8.201E-04	.0699	1.010E-03	.0861	1.143E-03	.0973	2.543E-03
OS 208(150)	33.91	32.89	8.201E-04	.0699	1.010E-03	.0861	1.143E-03	.0973	2.543E-03
HOT 2508(150)	33.91	32.89	8.201E-04	.0699	1.010E-03	.0861	1.143E-03	.0973	2.543E-03
NOS 6908(150)	33.91	32.89	8.201E-04	.0699	1.010E-03	.0861	1.143E-03	.0973	2.543E-03
HOT 2509(150)	34.99	33.96	8.070E-04	.0688	9.939E-04	.0847	1.124E-03	.0958	2.505E-03
TOP 5409(150)	35.02	33.99	8.067E-04	.0688	9.935E-04	.0847	1.124E-03	.0958	2.504E-03
OS 209(150)	35.02	33.99	8.067E-04	.0688	9.935E-04	.0847	1.124E-03	.0958	2.504E-03
NOS 6909(150)	35.02	33.99	8.067E-04	.0688	9.935E-04	.0847	1.124E-03	.0958	2.504E-03
TOP 5410(150)	36.09	35.07	7.942E-04	.0677	9.782E-04	.0833	1.106E-03	.0943	2.463E-03
OS 210(150)	36.09	35.07	7.942E-04	.0677	9.782E-04	.0833	1.106E-03	.0943	2.463E-03
HOT 2510(150)	36.09	35.07	7.942E-04	.0677	9.782E-04	.0833	1.106E-03	.0943	2.463E-03
NOS 6910(150)	36.09	35.07	7.942E-04	.0677	9.782E-04	.0833	1.106E-03	.0943	2.463E-03
TOP 5411(150)	37.19	36.17	7.820E-04	.0666	9.631E-04	.0821	1.090E-03	.0928	2.425E-03
OS 211(150)	37.19	36.17	7.820E-04	.0666	9.631E-04	.0821	1.090E-03	.0928	2.425E-03
HOT 2511(150)	37.19	36.17	7.820E-04	.0666	9.631E-04	.0821	1.090E-03	.0928	2.425E-03
NOS 6911(150)	37.19	36.17	7.820E-04	.0666	9.631E-04	.0821	1.090E-03	.0928	2.425E-03

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
4	1	7.90	108.3	1272	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
94.3	.012	.526	3759	1.071E-05	7.594E-08	5.203E 05	1.174E-02	3.676E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	150	79	.0505	9.696E-02	9.3126E-02
OP SIDE(OS)	7386	150	79	.0505	9.696E-02	9.3126E-02
BOTTOM(BOT)	7514	150	79	.0505	9.696E-02	9.3126E-02
TOP(TOP)	8436	150	79	.0505	9.696E-02	9.3126E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5412(150)	38.29	37.27	7.704E-04	.0656	9.488E-04	.0808	1.073E-03	.0914	2.389E-03
OS 212(150)	38.29	37.27	7.704E-04	.0656	9.488E-04	.0808	1.073E-03	.0914	2.389E-03
BOT 2512(150)	38.29	37.27	7.704E-04	.0656	9.488E-04	.0808	1.073E-03	.0914	2.389E-03
NOS 6912(150)	38.29	37.27	7.704E-04	.0656	9.488E-04	.0808	1.073E-03	.0914	2.389E-03
	38.57		MODEL WAS LEFT CENTERLINE						
TOP 5413(150)	39.37	38.34	7.595E-04	.0647	9.354E-04	.0797	1.058E-03	.0902	2.355E-03
OS 213(150)	39.37	38.34	7.595E-04	.0647	9.354E-04	.0797	1.058E-03	.0902	2.355E-03
BOT 2513(150)	39.37	38.34	7.595E-04	.0647	9.354E-04	.0797	1.058E-03	.0902	2.355E-03
NOS 6913(150)	39.40	38.37	7.592E-04	.0647	9.351E-04	.0797	1.058E-03	.0901	2.354E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

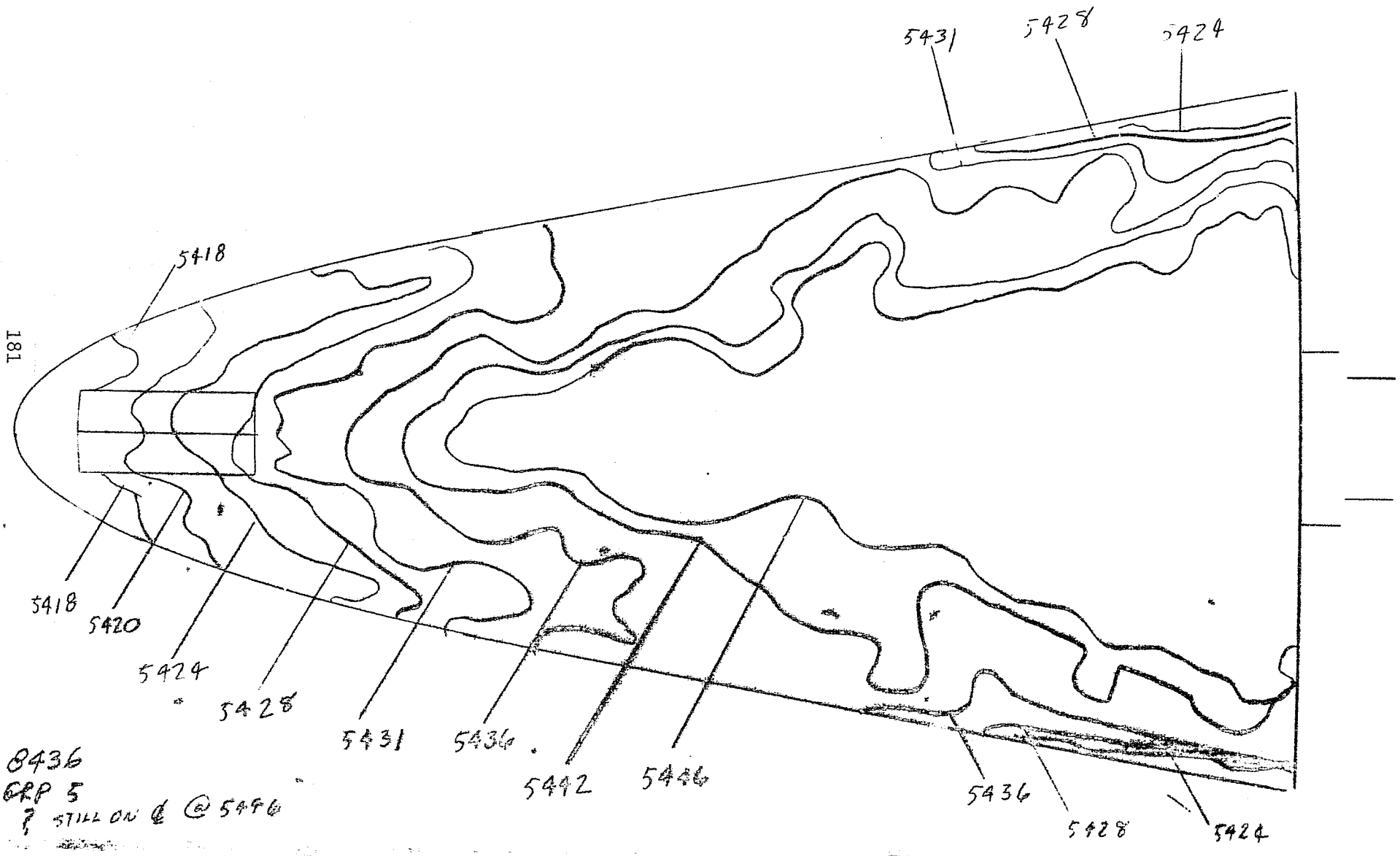
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
4	1	7.90	108.3	1272	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.526	3759	1.071E-05	7.594E-08	5.303E 05	1.174E-02	3.676E-02

CAMERA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXR)	YBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	150	79	.0505	9.696E-02	9.3126E-02
OP SIDE(OS)	7386	150	79	.0505	9.696E-02	9.3126E-02
BOTTOM(BOT)	7514	150	79	.0505	9.696E-02	9.3126E-02
TOP(TOP)	8436	150	79	.0505	9.696E-02	9.3126E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5412(150)	38.29	37.27	7.704E-04	.0656	9.488E-04	.0808	1.073E-03	.0914	2.389E-03
OS 212(150)	38.29	37.27	7.704E-04	.0656	9.488E-04	.0808	1.073E-03	.0914	2.389E-03
BOT 2512(150)	38.29	37.27	7.704E-04	.0656	9.488E-04	.0808	1.073E-03	.0914	2.389E-03
NOS 6912(150)	38.29	37.27	7.704E-04	.0656	9.488E-04	.0808	1.073E-03	.0916	2.389E-03
	38.57		MODEL WAS LEFT CENTERLINE						
TOP 5413(150)	39.37	38.36	7.595E-04	.0647	9.354E-04	.0797	1.058E-03	.0902	2.355E-03
OS 213(150)	39.37	38.36	7.595E-04	.0647	9.354E-04	.0797	1.058E-03	.0902	2.355E-03
BOT 2513(150)	39.37	38.36	7.595E-04	.0647	9.354E-04	.0797	1.058E-03	.0902	2.355E-03
NOS 6913(150)	39.40	38.37	7.592E-04	.0647	9.351E-04	.0797	1.058E-03	.0901	2.354E-03

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8436
GRP 5
? STILL ON ℄ @ 5446

NASA-RI 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
5	1	7.90	104.3	1268	29.97	.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.0	.012	.576	3754	1.034E-05	7.570E-08	5.129E 05	1.151E-02	3.739E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXC**)	TBAR(TO)	BETA(TO)
NOS SIDE(NOS)	7610	150	78	.0505	0	0
UP SIDE(US)	7386	150	78	.0505	0	0
BOTTOM(BOT)	7514	150	78	.0505	0	0
TOP(TOP)	8436	150	78	.0505	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 5404(150)		.03	MODEL HAS NOT REACHED CENTERLINE						
US 214(150)		.03	MODEL HAS NOT REACHED CENTERLINE						
NO 2514(150)		.03	MODEL HAS NOT REACHED CENTERLINE						
NO 6914(150)		.03	MODEL HAS NOT REACHED CENTERLINE						
TO 5405(150)		1.08	MODEL HAS NOT REACHED CENTERLINE						
US 215(150)		1.08	MODEL HAS NOT REACHED CENTERLINE						
NO 2515(150)		1.08	MODEL HAS NOT REACHED CENTERLINE						
NO 6915(150)		1.08	MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =		1.73							
NOT 2516(150)	2.15	1.18	4.409E-03	.3829	5.435E-03	.4719	6.152E-03	.5342	1.417E-02
TOP 5406(150)	2.18	1.21	4.363E-03	.3791	5.378E-03	.4672	6.088E-03	.5289	1.404E-02
US 216(150)	2.18	1.21	4.363E-03	.3791	5.378E-02	.4672	6.088E-03	.5289	1.404E-02
NOS 6916(150)	2.18	1.21	3.173E-03	.2757	3.911E-03	.3398	4.427E-03	.3846	1.021E-02
TOP 5407(150)	3.25	2.28	3.173E-03	.2757	3.911E-03	.3398	4.427E-03	.3846	1.021E-02
US 217(150)	3.25	2.28	3.173E-03	.2757	3.911E-03	.3398	4.427E-03	.3846	1.021E-02
NOT 2517(150)	3.25	2.28	3.173E-03	.2757	3.911E-03	.3398	4.427E-03	.3846	1.021E-02
NOS 6917(150)	3.25	2.28	2.606E-03	.2263	3.212E-03	.2790	3.636E-03	.3158	8.375E-03
TOP 5408(150)	4.36	3.39	2.606E-03	.2263	3.212E-03	.2790	3.636E-03	.3158	8.375E-03
US 218(150)	4.36	3.39	2.606E-03	.2263	3.212E-03	.2790	3.636E-03	.3158	8.375E-03
NOT 2518(150)	4.36	3.39	2.606E-03	.2263	3.212E-03	.2790	3.636E-03	.3158	8.375E-03
NOS 6918(150)	4.36	3.39	2.270E-03	.1970	2.798E-03	.2429	3.160E-03	.2749	7.289E-03
NOT 2519(150)	5.43	4.46	2.264E-03	.1966	2.790E-03	.2423	3.159E-03	.2743	7.275E-03
TOP 5409(150)	5.46	4.49	2.264E-03	.1966	2.790E-03	.2423	3.159E-03	.2743	7.275E-03
US 219(150)	5.46	4.49	2.264E-03	.1966	2.790E-03	.2423	3.159E-03	.2743	7.275E-03
NOS 6919(150)	5.46	4.49	2.033E-03	.1765	2.506E-03	.2175	2.837E-03	.2462	6.527E-03
TOP 5410(150)	6.53	5.56	2.033E-03	.1765	2.506E-03	.2175	2.837E-03	.2462	6.527E-03
US 220(150)	6.53	5.56	2.033E-03	.1765	2.506E-03	.2175	2.837E-03	.2462	6.527E-03
NOT 2520(150)	6.53	5.56	2.033E-03	.1765	2.506E-03	.2175	2.837E-03	.2462	6.527E-03
NOS 6920(150)	6.53	5.56							

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3/29/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE

VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
5	1	7.90	104.5	1268	29.97	.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
94.0	.012	.507	3754	1.036E-05	7.570E-08	5.139E 05	1.152E-02	3.706E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	150	78	.0505	9.874E-02	9.4957E-02
OP SIDE(OS)	7386	150	78	.0505	9.874E-02	9.4957E-02
BOTTOM(BOT)	7514	150	78	.0505	9.874E-02	9.4957E-02
TOP(TOP)	8436	150	78	.0505	9.874E-02	9.4957E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5411(150)	7.63	6.66	1.858E-03	.1612	2.290E-03	.1986	2.592E-03	.2249	5.958E-03
OS 221(150)	7.63	6.66	1.858E-03	.1612	2.290E-03	.1986	2.592E-03	.2249	5.958E-03
BOT 2521(150)	7.63	6.66	1.858E-03	.1612	2.290E-03	.1986	2.592E-03	.2249	5.958E-03
NOS 6921(150)	7.63	6.66	1.858E-03	.1612	2.290E-03	.1986	2.592E-03	.2249	5.958E-03
TOP 5412(150)	8.74	7.77	1.721E-03	.1493	2.121E-03	.1840	2.401E-03	.2083	5.519E-03
OS 222(150)	8.74	7.77	1.721E-03	.1493	2.121E-03	.1840	2.401E-03	.2083	5.519E-03
BOT 2522(150)	8.74	7.77	1.721E-03	.1493	2.121E-03	.1840	2.401E-03	.2083	5.519E-03
NOS 6922(150)	8.74	7.77	1.721E-03	.1493	2.121E-03	.1840	2.401E-03	.2083	5.519E-03
BOT 2523(150)	9.81	8.84	1.613E-03	.1398	1.988E-03	.1724	2.250E-03	.1951	5.168E-03
TOP 5413(150)	9.84	8.87	1.610E-03	.1397	1.985E-03	.1722	2.247E-03	.1949	5.165E-03
OS 223(150)	9.84	8.87	1.610E-03	.1397	1.985E-03	.1722	2.247E-03	.1949	5.165E-03
NOS 6923(150)	9.84	8.87	1.610E-03	.1397	1.985E-03	.1722	2.247E-03	.1949	5.165E-03
TOP 5414(150)	10.91	9.94	1.521E-03	.1319	1.874E-03	.1625	2.122E-03	.1840	4.873E-03
OS 224(150)	10.91	9.94	1.521E-03	.1319	1.874E-03	.1625	2.122E-03	.1840	4.873E-03
BOT 2524(150)	10.91	9.94	1.521E-03	.1319	1.874E-03	.1625	2.122E-03	.1840	4.873E-03
NOS 6924(150)	10.91	9.94	1.521E-03	.1319	1.874E-03	.1625	2.122E-03	.1840	4.873E-03
TOP 5415(150)	12.01	11.04	1.443E-03	.1250	1.779E-03	.1541	2.013E-03	.1744	4.615E-03
OS 225(150)	12.01	11.04	1.443E-03	.1250	1.779E-03	.1541	2.013E-03	.1744	4.615E-03
BOT 2525(150)	12.01	11.04	1.443E-03	.1250	1.779E-03	.1541	2.013E-03	.1744	4.615E-03
NOS 6925(150)	12.01	11.04	1.443E-03	.1250	1.779E-03	.1541	2.013E-03	.1744	4.615E-03
TOP 5416(150)	13.12	12.15	1.376E-03	.1193	1.696E-03	.1470	1.920E-03	.1664	4.405E-03
OS 226(150)	13.12	12.15	1.376E-03	.1193	1.696E-03	.1470	1.920E-03	.1664	4.405E-03
BOT 2526(150)	13.12	12.15	1.376E-03	.1193	1.696E-03	.1470	1.920E-03	.1664	4.405E-03
NOS 6926(150)	13.12	12.15	1.376E-03	.1193	1.696E-03	.1470	1.920E-03	.1664	4.405E-03
BOT 2527(150)	14.19	13.22	1.319E-03	.1143	1.626E-03	.1409	1.840E-03	.1595	4.222E-03

3/29/74

NASA-RI ONSO

AEDC(APO.IAC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
5	1	7.90	104.8	1268	29.97	.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.0	.012	.505	3753	1.040E-05	7.569E-08	5.155E 05	1.154E-02	3.730E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	150	78	.0505	9.874E-02	9.4957E-02
OP SIDE(OS)	7386	150	78	.0505	9.874E-02	9.4957E-02
BOTTOM(BOT)	7514	150	78	.0505	9.874E-02	9.4957E-02
TOP(TOP)	8436	150	78	.0505	9.874E-02	9.4957E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5417(150)	14.22	13.25	1.318E-03	.1142	1.624E-03	.1408	1.838E-03	.1593	4.218E-03
OS 227(150)	14.22	13.25	1.318E-03	.1142	1.624E-03	.1408	1.838E-03	.1593	4.218E-03
NOS 6927(150)	14.22	13.25	1.318E-03	.1142	1.624E-03	.1408	1.838E-03	.1593	4.218E-03
TOP 5418(150)	15.29	14.32	1.267E-03	.1098	1.562E-03	.1353	1.768E-03	.1532	4.052E-03
OS 228(150)	15.29	14.32	1.267E-03	.1098	1.562E-03	.1353	1.768E-03	.1532	4.052E-03
HOT 2528(150)	15.29	14.32	1.267E-03	.1098	1.562E-03	.1353	1.768E-03	.1532	4.052E-03
NOS 6928(150)	15.29	14.32	1.267E-03	.1098	1.562E-03	.1353	1.768E-03	.1532	4.052E-03
TOP 5419(150)	16.39	15.42	1.221E-03	.1057	1.505E-03	.1303	1.704E-03	.1475	3.901E-03
OS 229(150)	16.39	15.42	1.221E-03	.1057	1.505E-03	.1303	1.704E-03	.1475	3.901E-03
HOT 2529(150)	16.39	15.42	1.221E-03	.1057	1.505E-03	.1303	1.704E-03	.1475	3.901E-03
NOS 6929(150)	16.39	15.42	1.221E-03	.1057	1.505E-03	.1303	1.704E-03	.1475	3.901E-03
TOP 5420(150)	17.50	16.53	1.180E-03	.1021	1.454E-03	.1259	1.646E-03	.1425	3.769E-03
OS 230(150)	17.50	16.53	1.180E-03	.1021	1.454E-03	.1259	1.646E-03	.1425	3.769E-03
HOT 2530(150)	17.50	16.53	1.180E-03	.1021	1.454E-03	.1259	1.646E-03	.1425	3.769E-03
NOS 6930(150)	17.50	16.53	1.180E-03	.1021	1.454E-03	.1259	1.646E-03	.1425	3.769E-03
TOP 5421(150)	18.60	17.63	1.142E-03	.0989	1.408E-03	.1218	1.594E-03	.1379	3.646E-03
OS 231(150)	18.60	17.63	1.142E-03	.0989	1.408E-03	.1218	1.594E-03	.1379	3.646E-03
HOT 2531(150)	18.60	17.63	1.142E-03	.0989	1.408E-03	.1218	1.594E-03	.1379	3.646E-03
NOS 6931(150)	18.60	17.63	1.142E-03	.0989	1.408E-03	.1218	1.594E-03	.1379	3.646E-03
TOP 5422(150)	19.67	18.70	1.109E-03	.0960	1.367E-03	.1183	1.547E-03	.1340	3.543E-03
OS 232(150)	19.67	18.70	1.109E-03	.0960	1.367E-03	.1183	1.547E-03	.1340	3.543E-03
HOT 2532(150)	19.67	18.70	1.109E-03	.0960	1.367E-03	.1183	1.547E-03	.1340	3.543E-03
NOS 6932(150)	19.67	18.70	1.109E-03	.0960	1.367E-03	.1183	1.547E-03	.1340	3.543E-03
TOP 5423(150)	20.77	19.80	1.078E-03	.0933	1.328E-03	.1150	1.504E-03	.1302	3.443E-03
OS 233(150)	20.77	19.80	1.078E-03	.0933	1.328E-03	.1150	1.504E-03	.1302	3.443E-03
HOT 2533(150)	20.77	19.80	1.078E-03	.0933	1.328E-03	.1150	1.504E-03	.1302	3.443E-03
NOS 6933(150)	20.77	19.80	1.078E-03	.0933	1.328E-03	.1150	1.504E-03	.1302	3.443E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

3/29/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
5	1	7.90	105.0	1268	29.97	.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
94.0	.012	.510	3754	1.041E-05	7.570E-08	5.164E 05	1.155E-02	3.727E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	150	78	.0505	9.874E-02	9.4957E-02
UP SIDE(OS)	7386	150	78	.0505	9.874E-02	9.4957E-02
HOTTOM(BOT)	7514	150	78	.0505	9.874E-02	9.4957E-02
TOP(TOP)	8436	150	78	.0505	9.874E-02	9.4957E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5424(150)	21.88	20.91	1.049E-03	.0907	1.293E-03	.1118	1.463E-03	.1266	3.345E-03
OS 234(150)	21.88	20.91	1.049E-03	.0907	1.293E-03	.1118	1.463E-03	.1266	3.345E-03
HOT 2534(150)	21.88	20.91	1.049E-03	.0907	1.293E-03	.1118	1.463E-03	.1266	3.345E-03
NOS 6934(150)	21.88	20.91	1.049E-03	.0907	1.293E-03	.1118	1.463E-03	.1266	3.345E-03
TOP 5425(150)	22.98	22.01	1.022E-03	.0884	1.260E-03	.1090	1.426E-03	.1234	3.260E-03
OS 235(150)	22.98	22.01	1.022E-03	.0884	1.260E-03	.1090	1.426E-03	.1234	3.260E-03
HOT 2535(150)	22.98	22.01	1.022E-03	.0884	1.260E-03	.1090	1.426E-03	.1234	3.260E-03
NOS 6935(150)	22.98	22.01	1.022E-03	.0884	1.260E-03	.1090	1.426E-03	.1234	3.260E-03
HOT 2536(150)	24.05	23.08	9.981E-04	.0863	1.230E-03	.1064	1.393E-03	.1205	3.183E-03
TOP 5426(150)	24.08	23.11	9.976E-04	.0863	1.230E-03	.1063	1.392E-03	.1203	3.178E-03
OS 236(150)	24.08	23.11	9.976E-04	.0863	1.230E-03	.1063	1.392E-03	.1203	3.178E-03
NOS 6936(150)	24.08	23.11	9.976E-04	.0863	1.230E-03	.1063	1.392E-03	.1203	3.178E-03
TOP 5427(150)	25.15	24.18	9.751E-04	.0844	1.202E-03	.1040	1.361E-03	.1178	3.112E-03
OS 237(150)	25.15	24.18	9.751E-04	.0844	1.202E-03	.1040	1.361E-03	.1178	3.112E-03
HOT 2537(150)	25.15	24.18	9.751E-04	.0844	1.202E-03	.1040	1.361E-03	.1178	3.112E-03
NOS 6937(150)	25.15	24.18	9.751E-04	.0844	1.202E-03	.1040	1.361E-03	.1178	3.112E-03
TOP 5428(150)	26.26	25.29	9.536E-04	.0825	1.175E-03	.1017	1.331E-03	.1151	3.041E-03
OS 238(150)	26.26	25.29	9.536E-04	.0825	1.175E-03	.1017	1.331E-03	.1151	3.041E-03
HOT 2538(150)	26.26	25.29	9.536E-04	.0825	1.175E-03	.1017	1.331E-03	.1151	3.041E-03
NOS 6938(150)	26.26	25.29	9.536E-04	.0825	1.175E-03	.1017	1.331E-03	.1151	3.041E-03
TOP 5429(150)	27.36	26.39	9.335E-04	.0807	1.151E-03	.0995	1.303E-03	.1126	2.974E-03
OS 239(150)	27.36	26.39	9.335E-04	.0807	1.151E-03	.0995	1.303E-03	.1126	2.974E-03
HOT 2539(150)	27.36	26.39	9.335E-04	.0807	1.151E-03	.0995	1.303E-03	.1126	2.974E-03
NOS 6939(150)	27.36	26.39	9.335E-04	.0807	1.151E-03	.0995	1.303E-03	.1126	2.974E-03
TOP 5430(150)	28.46	27.49	9.166E-04	.0791	1.127E-03	.0975	1.276E-03	.1103	2.914E-03
OS 240(150)	28.46	27.49	9.166E-04	.0791	1.127E-03	.0975	1.276E-03	.1103	2.914E-03
HOT 2540(150)	28.46	27.49	9.166E-04	.0791	1.127E-03	.0975	1.276E-03	.1103	2.914E-03
NOS 6940(150)	28.46	27.49	9.166E-04	.0791	1.127E-03	.0975	1.276E-03	.1103	2.914E-03

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
5	1	7.90	105.3	1268	29.97	.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.0	.012	.511	3754	1.044E-05	7.570E-08	5.179E 05	1.157E-02	3.721E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	150	78	.0505	9.874E-02	9.4957E-02
UP SIDE(US)	7386	150	78	.0505	9.874E-02	9.4957E-02
BOTTOM(BOT)	7514	150	78	.0505	9.874E-02	9.4957E-02
TOP(TOP)	8436	150	78	.0505	9.874E-02	9.4957E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
HOT 2541(150)	29.53	28.56	8.972E-04	.0775	1.106E-03	.0956	1.252E-03	.1082	2.856E-03
TOP 5431(150)	29.56	28.59	8.968E-04	.0775	1.105E-03	.0955	1.251E-03	.1081	2.855E-03
OS 241(150)	29.56	28.59	8.968E-04	.0775	1.105E-03	.0955	1.251E-03	.1081	2.855E-03
NOS 6941(150)	29.56	28.59	8.968E-04	.0775	1.105E-03	.0955	1.251E-03	.1081	2.855E-03
TOP 5432(150)	30.64	29.67	8.804E-04	.0761	1.085E-03	.0938	1.228E-03	.1062	2.802E-03
OS 242(150)	30.64	29.67	8.804E-04	.0761	1.085E-03	.0938	1.228E-03	.1062	2.802E-03
HOT 2542(150)	30.64	29.67	8.804E-04	.0761	1.085E-03	.0938	1.228E-03	.1062	2.802E-03
NOS 6942(150)	30.64	29.67	8.804E-04	.0761	1.085E-03	.0938	1.228E-03	.1062	2.802E-03
TOP 5433(150)	31.74	30.77	8.645E-04	.0747	1.066E-03	.0921	1.206E-03	.1043	2.752E-03
OS 243(150)	31.74	30.77	8.645E-04	.0747	1.066E-03	.0921	1.206E-03	.1043	2.752E-03
HOT 2543(150)	31.74	30.77	8.645E-04	.0747	1.066E-03	.0921	1.206E-03	.1043	2.752E-03
NOS 6943(150)	31.74	30.77	8.645E-04	.0747	1.066E-03	.0921	1.206E-03	.1043	2.752E-03
TOP 5434(150)	32.84	31.87	8.495E-04	.0734	1.047E-03	.0905	1.185E-03	.1024	2.704E-03
OS 244(150)	32.84	31.87	8.495E-04	.0734	1.047E-03	.0905	1.185E-03	.1024	2.704E-03
HOT 2544(150)	32.84	31.87	8.495E-04	.0734	1.047E-03	.0905	1.185E-03	.1024	2.704E-03
NOS 6944(150)	32.84	31.87	8.495E-04	.0734	1.047E-03	.0905	1.185E-03	.1024	2.704E-03
HOT 2545(150)	33.91	32.94	8.355E-04	.0721	1.030E-03	.0889	1.166E-03	.1006	2.654E-03
TOP 5435(150)	33.94	32.97	8.351E-04	.0722	1.029E-03	.0890	1.165E-03	.1007	2.658E-03
OS 245(150)	33.94	32.97	8.351E-04	.0722	1.029E-03	.0890	1.165E-03	.1007	2.658E-03
NOS 6945(150)	33.94	32.97	8.351E-04	.0722	1.029E-03	.0890	1.165E-03	.1007	2.658E-03
TOP 5436(150)	35.02	34.05	8.218E-04	.0710	1.013E-03	.0875	1.147E-03	.0990	2.611E-03
OS 246(150)	35.02	34.05	8.218E-04	.0710	1.013E-03	.0875	1.147E-03	.0990	2.611E-03
HOT 2546(150)	35.02	34.05	8.218E-04	.0710	1.013E-03	.0875	1.147E-03	.0990	2.611E-03
NOS 6946(150)	35.02	34.05	8.218E-04	.0710	1.013E-03	.0875	1.147E-03	.0990	2.611E-03
TOP 5437(150)	36.12	35.15	8.089E-04	.0698	9.970E-04	.0861	1.129E-03	.0974	2.570E-03
US 247(150)	36.12	35.15	8.089E-04	.0698	9.970E-04	.0861	1.129E-03	.0974	2.570E-03
HOT 2547(150)	36.12	35.15	8.089E-04	.0698	9.970E-04	.0861	1.129E-03	.0974	2.570E-03
NOS 6947(150)	36.12	35.15	8.089E-04	.0698	9.970E-04	.0861	1.129E-03	.0974	2.570E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

NASA-RI 0H50 AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
5	1	7.90	105.6	1268	29.97	.03	30.00	0	0

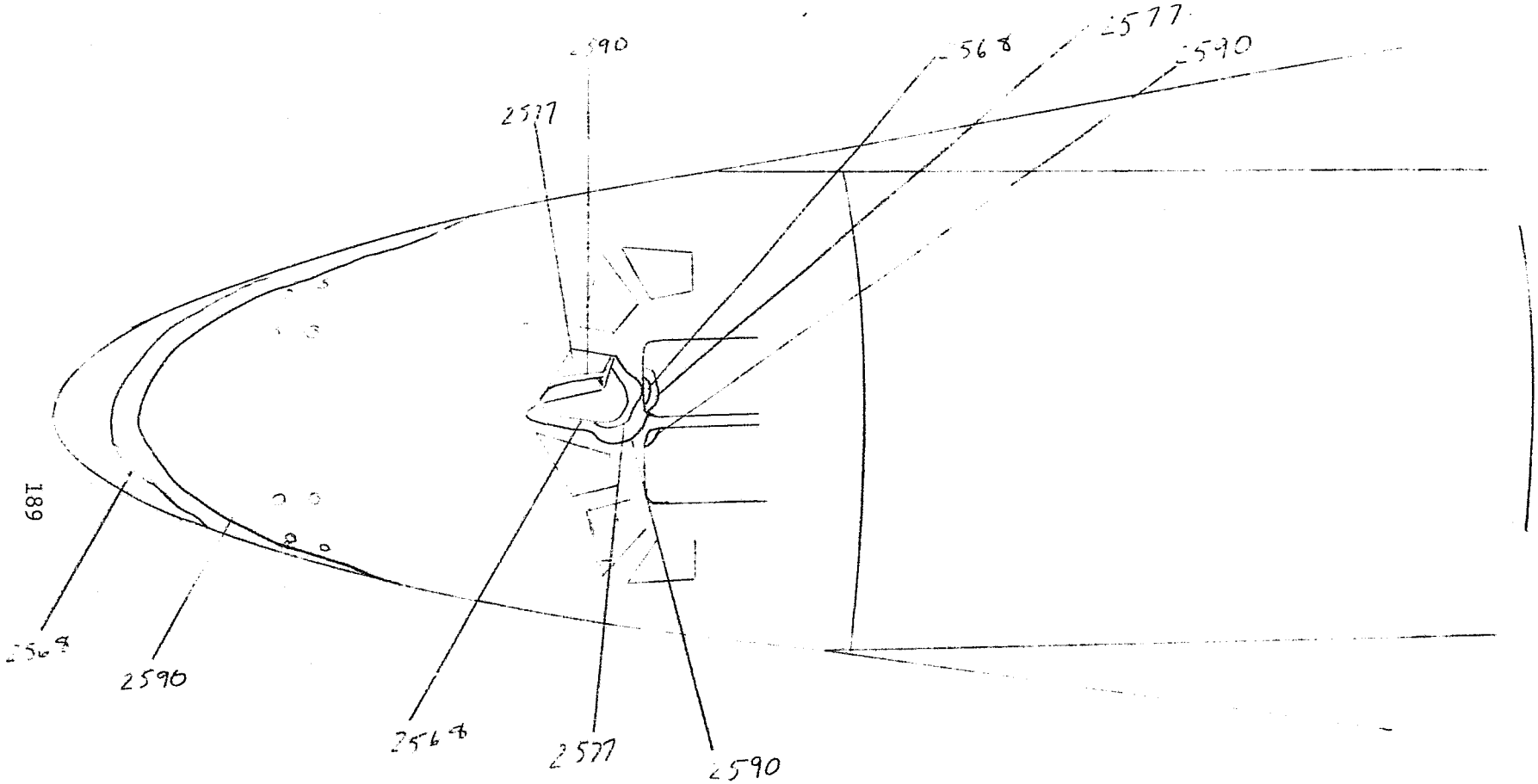
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.0	.012	.513	3754	1.047E-05	7.570E-08	5.194E 05	1.158E-02	3.716E-02

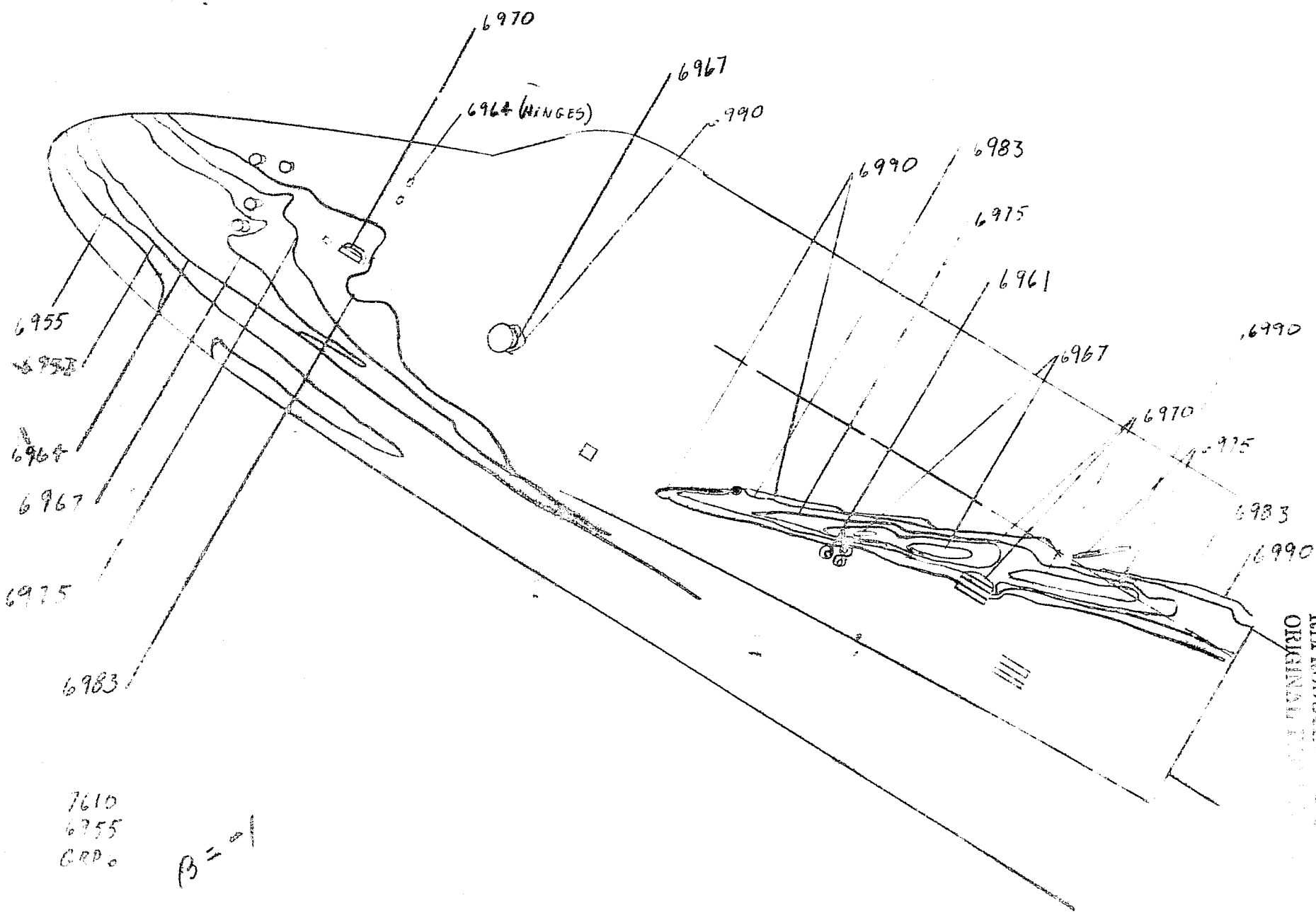
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7610	150	78	.0505	9.874E-02	9.4957E-02
UP SIDE(OS)	7386	150	78	.0505	9.874E-02	9.4957E-02
BOTTOM(BOT)	7514	150	78	.0505	9.874E-02	9.4957E-02
TOP(TOP)	8436	150	78	.0505	9.874E-02	9.4957E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9T0)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5438(150)	37.22	36.25	7.965E-04	.0688	9.817E-04	.0848	1.111E-03	.0960	2.533E-03
OS 248(150)	37.22	36.25	7.965E-04	.0688	9.817E-04	.0848	1.111E-03	.0960	2.533E-03
BOT 2548(150)	37.22	36.25	7.965E-04	.0688	9.817E-04	.0848	1.111E-03	.0960	2.533E-03
NOS 6948(150)	37.22	36.25	7.965E-04	.0688	9.817E-04	.0848	1.111E-03	.0960	2.533E-03
OS 249(150)	38.29	37.32	7.849E-04	.0678	9.675E-04	.0835	1.095E-03	.0946	2.494E-03
BOT 2549(150)	38.29	37.32	7.849E-04	.0678	9.675E-04	.0835	1.095E-03	.0946	2.494E-03
TOP 5439(150)	38.32	37.35	7.847E-04	.0678	9.672E-04	.0835	1.095E-03	.0946	2.495E-03
NOS 6949(150)	38.32	37.35	7.847E-04	.0678	9.672E-04	.0835	1.095E-03	.0946	2.495E-03
	38.64		MODEL HAS LEFT CENTERLINE						
TOP 5440(150)	39.40	38.43	7.736E-04	.0668	9.535E-04	.0823	1.079E-03	.0931	2.455E-03
OS 250(150)	39.40	38.43	7.736E-04	.0668	9.535E-04	.0823	1.079E-03	.0931	2.455E-03
BOT 2550(150)	39.40	38.43	7.736E-04	.0668	9.535E-04	.0823	1.079E-03	.0931	2.455E-03
NOS 6950(150)	39.40	38.43	7.736E-04	.0668	9.535E-04	.0823	1.079E-03	.0931	2.455E-03
TOP 5441(150)	40.50	39.53	7.627E-04	.0658	9.401E-04	.0811	1.064E-03	.0918	2.421E-03
OS 251(150)	40.50	39.53	7.627E-04	.0658	9.401E-04	.0811	1.064E-03	.0918	2.421E-03
BOT 2551(150)	40.50	39.53	7.627E-04	.0658	9.401E-04	.0811	1.064E-03	.0918	2.421E-03
NOS 6951(150)	40.50	39.53	7.627E-04	.0658	9.401E-04	.0811	1.064E-03	.0918	2.421E-03
TOP 5442(150)	41.57	40.60	7.526E-04	.0650	9.276E-04	.0801	1.050E-03	.0907	2.391E-03
OS 252(150)	41.57	40.60	7.526E-04	.0650	9.276E-04	.0801	1.050E-03	.0907	2.391E-03
BOT 2552(150)	41.57	40.60	7.526E-04	.0650	9.276E-04	.0801	1.050E-03	.0907	2.391E-03
NOS 6952(150)	41.57	40.60	7.526E-04	.0650	9.276E-04	.0801	1.050E-03	.0907	2.391E-03

188

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REPRODUCED FROM
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NASA-RI OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VAS26 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
6	1	7.90	104.5	1261	29.96	.03	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.012	.597	3744	1.042E-05	7.533E-08	5.177E 05	1.151E-02	3.724E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOX[illegible]	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	78	.0486	0	0
UP SIDE(OS)	7386	113	78	.0486	0	0
BOTTOM(BOT)	7514	113	78	.0486	0	0
TOP(TOP)	8436	113	78	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 5453(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 253(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 2553(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 6953(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 5454(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 254(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 2554(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 6954(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.78								
HOT 2555(113)	2.18	1.18	1.996E-03	.1733	2.436E-03	.2115	2.741E-03	.2380	6.400E-03
TOP 5455(113)	2.20	1.20	1.975E-03	.1714	2.411E-03	.2092	2.712E-03	.2354	6.327E-03
OS 255(113)	2.20	1.20	1.975E-03	.1714	2.411E-03	.2092	2.712E-03	.2354	6.327E-03
NOS 6955(113)	2.20	1.20	1.975E-03	.1714	2.411E-03	.2092	2.712E-03	.2354	6.327E-03
TOP 5456(113)	3.28	2.28	1.435E-03	.1246	1.752E-03	.1521	1.971E-03	.1711	4.603E-03
OS 256(113)	3.28	2.28	1.435E-03	.1246	1.752E-03	.1521	1.971E-03	.1711	4.603E-03
HOT 2556(113)	3.28	2.28	1.435E-03	.1246	1.752E-03	.1521	1.971E-03	.1711	4.603E-03
NOS 6956(113)	3.28	2.28	1.435E-03	.1246	1.752E-03	.1521	1.971E-03	.1711	4.603E-03
TOP 5457(113)	4.38	3.38	1.179E-03	.1023	1.439E-03	.1249	1.619E-03	.1405	3.776E-03
OS 257(113)	4.38	3.38	1.179E-03	.1023	1.439E-03	.1249	1.619E-03	.1405	3.776E-03
HOT 2557(113)	4.38	3.38	1.179E-03	.1023	1.439E-03	.1249	1.619E-03	.1405	3.776E-03
NOS 6957(113)	4.38	3.38	1.179E-03	.1023	1.439E-03	.1249	1.619E-03	.1405	3.776E-03
HOT 2558(113)	5.46	4.46	1.027E-03	.0891	1.253E-03	.1088	1.410E-03	.1224	3.289E-03
TOP 5458(113)	5.48	4.48	1.024E-03	.0888	1.250E-03	.1085	1.406E-03	.1220	3.280E-03
OS 258(113)	5.48	4.48	1.024E-03	.0888	1.250E-03	.1085	1.406E-03	.1220	3.280E-03
NOS 6958(113)	5.48	4.48	1.024E-03	.0888	1.250E-03	.1085	1.406E-03	.1220	3.280E-03
TOP 5459(113)	6.56	5.56	9.193E-04	.0797	1.122E-03	.0973	1.263E-03	.1095	2.943E-03
OS 259(113)	6.56	5.56	9.193E-04	.0797	1.122E-03	.0973	1.263E-03	.1095	2.943E-03
HOT 2559(113)	6.56	5.56	9.193E-04	.0797	1.122E-03	.0973	1.263E-03	.1095	2.943E-03
NOS 6959(113)	6.56	5.56	9.193E-04	.0797	1.122E-03	.0973	1.263E-03	.1095	2.943E-03

3/29/74

NASA-RI OH50 AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
6	1	7.90	104.8	1261	29.96	.03	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	MREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.012	.505	3744	1.045E-05	7.533E-08	5.192E 05	1.153E-02	3.719E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	78	.0486	4.839E-02	4.4603E-02
UP SIDE(US)	7386	113	78	.0486	4.839E-02	4.4603E-02
BOTTOM(BOT)	7514	113	78	.0486	4.839E-02	4.4603E-02
TOP(TOP)	8636	113	78	.0486	4.839E-02	4.4603E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5460(113)	7.66	6.66	8.399E-04	.0729	1.025E-03	.0889	1.153E-03	.1001	2.688E-03
US 260(113)	7.66	6.66	8.399E-04	.0729	1.025E-03	.0889	1.153E-03	.1001	2.688E-03
BOT 2560(113)	7.66	6.66	8.399E-04	.0729	1.025E-03	.0889	1.153E-03	.1001	2.688E-03
NOS 6960(113)	7.66	6.66	8.399E-04	.0729	1.025E-03	.0889	1.153E-03	.1001	2.688E-03
TOP 5461(113)	8.76	7.76	7.780E-04	.0675	9.497E-04	.0824	1.069E-03	.0927	2.490E-03
US 261(113)	8.76	7.76	7.780E-04	.0675	9.497E-04	.0824	1.069E-03	.0927	2.490E-03
BOT 2561(113)	8.76	7.76	7.780E-04	.0675	9.497E-04	.0824	1.069E-03	.0927	2.490E-03
NOS 6961(113)	8.76	7.76	7.780E-04	.0675	9.497E-04	.0824	1.069E-03	.0927	2.490E-03
TOP 5462(113)	9.86	8.86	7.281E-04	.0631	8.888E-04	.0771	9.999E-04	.0867	2.328E-03
US 262(113)	9.86	8.86	7.281E-04	.0631	8.888E-04	.0771	9.999E-04	.0867	2.328E-03
BOT 2562(113)	9.86	8.86	7.281E-04	.0631	8.888E-04	.0771	9.999E-04	.0867	2.328E-03
NOS 6962(113)	9.86	8.86	7.281E-04	.0631	8.888E-04	.0771	9.999E-04	.0867	2.328E-03
BOT 2563(113)	10.96	9.96	6.876E-04	.0596	8.393E-04	.0727	9.442E-04	.0818	2.196E-03
TOP 5463(113)	10.96	9.96	6.867E-04	.0596	8.382E-04	.0727	9.431E-04	.0818	2.198E-03
US 263(113)	10.96	9.96	6.867E-04	.0596	8.382E-04	.0727	9.431E-04	.0818	2.198E-03
NOS 6963(113)	10.96	9.96	6.867E-04	.0596	8.382E-04	.0727	9.431E-04	.0818	2.198E-03
TOP 5464(113)	12.06	11.06	6.526E-04	.0565	7.963E-04	.0690	8.959E-04	.0776	2.082E-03
US 264(113)	12.06	11.06	6.526E-04	.0565	7.963E-04	.0690	8.959E-04	.0776	2.082E-03
BOT 2564(113)	12.06	11.06	6.526E-04	.0565	7.963E-04	.0690	8.959E-04	.0776	2.082E-03
NOS 6964(113)	12.06	11.06	6.526E-04	.0565	7.963E-04	.0690	8.959E-04	.0776	2.082E-03
TOP 5465(113)	13.16	12.16	6.221E-04	.0539	7.594E-04	.0658	8.543E-04	.0740	1.985E-03
US 265(113)	13.16	12.16	6.221E-04	.0539	7.594E-04	.0658	8.543E-04	.0740	1.985E-03
BOT 2565(113)	13.16	12.16	6.221E-04	.0539	7.594E-04	.0658	8.543E-04	.0740	1.985E-03
NOS 6965(113)	13.16	12.16	6.221E-04	.0539	7.594E-04	.0658	8.543E-04	.0740	1.985E-03
BOT 2566(113)	14.22	12.22	5.962E-04	.0516	7.278E-04	.0630	8.188E-04	.0709	1.903E-03

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3/29/74

NASA-RI 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA528

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
6	1	7.90	105.1	1261	29.96	.03	30.00	-2.00	1.08

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.012	.510	3746	1.048E-05	7.531E-08	5.209E 05	1.154E-02	3.713E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	78	.0486	4.839E-02	4.4603E-02
UP SIDE(US)	7386	113	78	.0486	4.839E-02	4.4603E-02
HOTTOM(BOT)	7514	113	78	.0486	4.839E-02	4.4603E-02
TOP(TOP)	8436	113	78	.0486	4.839E-02	4.4603E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5466(113)	14.24	13.24	5.957E-04	.0516	7.271E-04	.0630	8.180E-04	.0709	1.901E-03
US 266(113)	14.24	13.24	5.957E-04	.0516	7.271E-04	.0630	8.180E-04	.0709	1.901E-03
NOS 6966(113)	14.24	13.24	5.957E-04	.0516	7.271E-04	.0630	8.180E-04	.0709	1.901E-03
HOT 2567(113)	15.32	14.32	5.728E-04	.0496	6.992E-04	.0605	7.867E-04	.0681	1.826E-03
TOP 5467(113)	15.34	14.35	5.723E-04	.0496	6.986E-04	.0605	7.860E-04	.0681	1.825E-03
US 267(113)	15.34	14.35	5.723E-04	.0496	6.986E-04	.0605	7.860E-04	.0681	1.825E-03
NOS 6967(113)	15.34	14.35	5.723E-04	.0496	6.986E-04	.0605	7.860E-04	.0681	1.825E-03
TOP 5468(113)	16.42	15.42	5.520E-04	.0478	6.738E-04	.0583	7.581E-04	.0656	1.760E-03
US 268(113)	16.42	15.42	5.520E-04	.0478	6.738E-04	.0583	7.581E-04	.0656	1.760E-03
HOT 2568(113)	16.42	15.42	5.520E-04	.0478	6.738E-04	.0583	7.581E-04	.0656	1.760E-03
NOS 6968(113)	16.42	15.42	5.520E-04	.0478	6.738E-04	.0583	7.581E-04	.0656	1.760E-03
TOP 5469(113)	17.52	16.52	5.333E-04	.0462	6.510E-04	.0564	7.324E-04	.0634	1.700E-03
US 269(113)	17.52	16.52	5.333E-04	.0462	6.510E-04	.0564	7.324E-04	.0634	1.700E-03
HOT 2569(113)	17.52	16.52	5.333E-04	.0462	6.510E-04	.0564	7.324E-04	.0634	1.700E-03
NOS 6969(113)	17.52	16.52	5.333E-04	.0462	6.510E-04	.0564	7.324E-04	.0634	1.700E-03
TOP 5470(113)	18.62	17.62	5.164E-04	.0447	6.303E-04	.0545	7.091E-04	.0614	1.645E-03
US 270(113)	18.62	17.62	5.164E-04	.0447	6.303E-04	.0545	7.091E-04	.0614	1.645E-03
HOT 2570(113)	18.62	17.62	5.164E-04	.0447	6.303E-04	.0545	7.091E-04	.0614	1.645E-03
NOS 6970(113)	18.62	17.62	5.164E-04	.0447	6.303E-04	.0545	7.091E-04	.0614	1.645E-03
TOP 5471(113)	19.72	18.73	5.009E-04	.0434	6.115E-04	.0529	6.880E-04	.0595	1.596E-03
US 271(113)	19.72	18.73	5.009E-04	.0434	6.115E-04	.0529	6.880E-04	.0595	1.596E-03
HOT 2571(113)	19.72	18.73	5.009E-04	.0434	6.115E-04	.0529	6.880E-04	.0595	1.596E-03
NOS 6971(113)	19.72	18.73	5.009E-04	.0434	6.115E-04	.0529	6.880E-04	.0595	1.596E-03
HOT 2572(113)	20.80	19.80	4.871E-04	.0422	5.946E-04	.0515	6.690E-04	.0579	1.552E-03
TOP 5472(113)	20.82	19.83	4.868E-04	.0421	5.943E-04	.0514	6.686E-04	.0579	1.551E-03
US 272(113)	20.82	19.83	4.868E-04	.0421	5.943E-04	.0514	6.686E-04	.0579	1.551E-03
NOS 6972(113)	20.82	19.83	4.868E-04	.0421	5.943E-04	.0514	6.686E-04	.0579	1.551E-03

3/29/74

NASA-RI 0H50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
6	1	7.90	105.3	1261	29.96	.03	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.012	.511	3744	1.050E-05	7.532E-08	5.218E 05	1.156E-02	3.710E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	78	.0486	4.839E-02	4.4603E-02
OP SIDE(OS)	7386	113	78	.0486	4.839E-02	4.4603E-02
BOTTOM(BOT)	7514	113	78	.0486	4.839E-02	4.4603E-02
TOP(TOP)	8436	113	78	.0486	4.839E-02	4.4603E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5473(113)	21.90	20.90	4.741E-04	.0410	5.788E-04	.0501	6.511E-04	.0563	1.510E-03
OS 273(113)	21.90	20.90	4.741E-04	.0410	5.788E-04	.0501	6.511E-04	.0563	1.510E-03
BOT 2573(113)	21.90	20.90	4.741E-04	.0410	5.788E-04	.0501	6.511E-04	.0563	1.510E-03
NOS 6973(113)	21.90	20.90	4.741E-04	.0410	5.788E-04	.0501	6.511E-04	.0563	1.510E-03
TOP 5474(113)	23.00	22.00	4.621E-04	.0400	5.641E-04	.0488	6.346E-04	.0549	1.472E-03
OS 274(113)	23.00	22.00	4.621E-04	.0400	5.641E-04	.0488	6.346E-04	.0549	1.472E-03
BOT 2574(113)	23.00	22.00	4.621E-04	.0400	5.641E-04	.0488	6.346E-04	.0549	1.472E-03
NOS 6974(113)	23.00	22.00	4.621E-04	.0400	5.641E-04	.0488	6.346E-04	.0549	1.472E-03
TOP 5475(113)	24.10	23.11	4.519E-04	.0390	5.505E-04	.0476	6.193E-04	.0535	1.434E-03
OS 275(113)	24.10	23.11	4.519E-04	.0390	5.505E-04	.0476	6.193E-04	.0535	1.434E-03
BOT 2575(113)	24.10	23.11	4.519E-04	.0390	5.505E-04	.0476	6.193E-04	.0535	1.434E-03
NOS 6975(113)	24.10	23.11	4.519E-04	.0390	5.505E-04	.0476	6.193E-04	.0535	1.434E-03
BOT 2576(113)	25.18	24.18	4.408E-04	.0381	5.381E-04	.0465	6.054E-04	.0524	1.403E-03
TOP 5476(113)	25.20	24.21	4.406E-04	.0381	5.378E-04	.0465	6.051E-04	.0523	1.401E-03
OS 276(113)	25.20	24.21	4.406E-04	.0381	5.378E-04	.0465	6.051E-04	.0523	1.401E-03
NOS 6976(113)	25.20	24.21	4.406E-04	.0381	5.378E-04	.0465	6.051E-04	.0523	1.401E-03
TOP 5477(113)	26.28	25.28	4.311E-04	.0373	5.262E-04	.0455	5.921E-04	.0512	1.372E-03
OS 277(113)	26.28	25.28	4.311E-04	.0373	5.262E-04	.0455	5.921E-04	.0512	1.372E-03
BOT 2577(113)	26.28	25.28	4.311E-04	.0373	5.262E-04	.0455	5.921E-04	.0512	1.372E-03
NOS 6977(113)	26.28	25.28	4.311E-04	.0373	5.262E-04	.0455	5.921E-04	.0512	1.372E-03
TOP 5478(113)	27.38	26.38	4.220E-04	.0365	5.151E-04	.0446	5.796E-04	.0501	1.343E-03
OS 278(113)	27.38	26.38	4.220E-04	.0365	5.151E-04	.0446	5.796E-04	.0501	1.343E-03
BOT 2578(113)	27.38	26.38	4.220E-04	.0365	5.151E-04	.0446	5.796E-04	.0501	1.343E-03
NOS 6978(113)	27.38	26.38	4.220E-04	.0365	5.151E-04	.0446	5.796E-04	.0501	1.343E-03
TOP 5479(113)	28.48	27.49	4.135E-04	.0358	5.047E-04	.0437	5.678E-04	.0492	1.318E-03
OS 279(113)	28.48	27.49	4.135E-04	.0358	5.047E-04	.0437	5.678E-04	.0492	1.318E-03
BOT 2579(113)	28.48	27.49	4.135E-04	.0358	5.047E-04	.0437	5.678E-04	.0492	1.318E-03
NOS 6979(113)	28.48	27.49	4.135E-04	.0358	5.047E-04	.0437	5.678E-04	.0492	1.318E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
6	1	7.90	105.2	1261	29.96	.03	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
93.5	.012	.511	3744	1.049E-05	7.530E-08	5.215E 05	1.165E-02	3.711E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	78	.0486	4.839E-02	4.4603E-02
OP SIDE(OS)	7386	113	78	.0486	4.839E-02	4.4603E-02
BOTTOM(BOT)	7514	113	78	.0485	4.839E-02	4.4603E-02
TOP(TOP)	8436	113	78	.0486	4.839E-02	4.4603E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
OS 280(113)	29.56	28.56	4.056E-04	.0351	4.951E-04	.0428	5.570E-04	.0482	1.290E-03
BOT 2580(113)	29.56	28.56	4.056E-04	.0351	4.951E-04	.0428	5.570E-04	.0482	1.290E-03
NOS 6980(113)	29.56	28.56	4.056E-04	.0351	4.951E-04	.0428	5.570E-04	.0482	1.290E-03
TOP 5480(113)	29.58	28.59	4.054E-04	.0351	4.949E-04	.0428	5.568E-04	.0481	1.289E-03
TOP 5481(113)	30.66	29.66	3.980E-04	.0344	4.858E-04	.0420	5.466E-04	.0473	1.265E-03
OS 281(113)	30.66	29.66	3.980E-04	.0344	4.858E-04	.0420	5.466E-04	.0473	1.265E-03
BOT 2581(113)	30.66	29.66	3.980E-04	.0344	4.858E-04	.0420	5.466E-04	.0473	1.265E-03
NOS 6981(113)	30.66	29.66	3.980E-04	.0344	4.858E-04	.0420	5.466E-04	.0473	1.265E-03
TOP 5482(113)	31.76	30.76	3.908E-04	.0338	4.771E-04	.0412	5.367E-04	.0464	1.242E-03
OS 282(113)	31.76	30.76	3.908E-04	.0338	4.771E-04	.0412	5.367E-04	.0464	1.242E-03
BOT 2582(113)	31.76	30.76	3.908E-04	.0338	4.771E-04	.0412	5.367E-04	.0464	1.242E-03
NOS 6982(113)	31.76	30.76	3.908E-04	.0338	4.771E-04	.0412	5.367E-04	.0464	1.242E-03
TOP 5483(113)	32.86	31.87	3.840E-04	.0332	4.687E-04	.0405	5.274E-04	.0456	1.221E-03
OS 283(113)	32.86	31.87	3.840E-04	.0332	4.687E-04	.0405	5.274E-04	.0456	1.221E-03
BOT 2583(113)	32.86	31.87	3.840E-04	.0332	4.687E-04	.0405	5.274E-04	.0456	1.221E-03
NOS 6983(113)	32.86	31.87	3.840E-04	.0332	4.687E-04	.0405	5.274E-04	.0456	1.221E-03
TOP 5484(113)	33.94	32.94	3.777E-04	.0326	4.610E-04	.0398	5.187E-04	.0448	1.198E-03
BOT 2584(113)	33.94	32.94	3.777E-04	.0326	4.610E-04	.0398	5.187E-04	.0448	1.198E-03
OS 284(113)	33.96	32.97	3.775E-04	.0326	4.609E-04	.0398	5.185E-04	.0448	1.200E-03
NOS 6984(113)	33.96	32.97	3.775E-04	.0326	4.609E-04	.0398	5.185E-04	.0448	1.200E-03
TOP 5485(113)	35.04	34.04	3.715E-04	.0321	4.535E-04	.0392	5.102E-04	.0441	1.179E-03
OS 285(113)	35.04	34.04	3.715E-04	.0321	4.535E-04	.0392	5.102E-04	.0441	1.179E-03
BOT 2585(113)	35.04	34.04	3.715E-04	.0321	4.535E-04	.0392	5.102E-04	.0441	1.179E-03
NOS 6985(113)	35.04	34.04	3.715E-04	.0321	4.535E-04	.0392	5.102E-04	.0441	1.179E-03
TOP 5486(113)	36.14	35.14	3.657E-04	.0316	4.463E-04	.0386	5.022E-04	.0434	1.160E-03
OS 286(113)	36.14	35.14	3.657E-04	.0316	4.463E-04	.0386	5.022E-04	.0434	1.160E-03
BOT 2586(113)	36.14	35.14	3.657E-04	.0316	4.463E-04	.0386	5.022E-04	.0434	1.160E-03
NOS 6986(113)	36.14	35.14	3.657E-04	.0316	4.463E-04	.0386	5.022E-04	.0434	1.160E-03

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

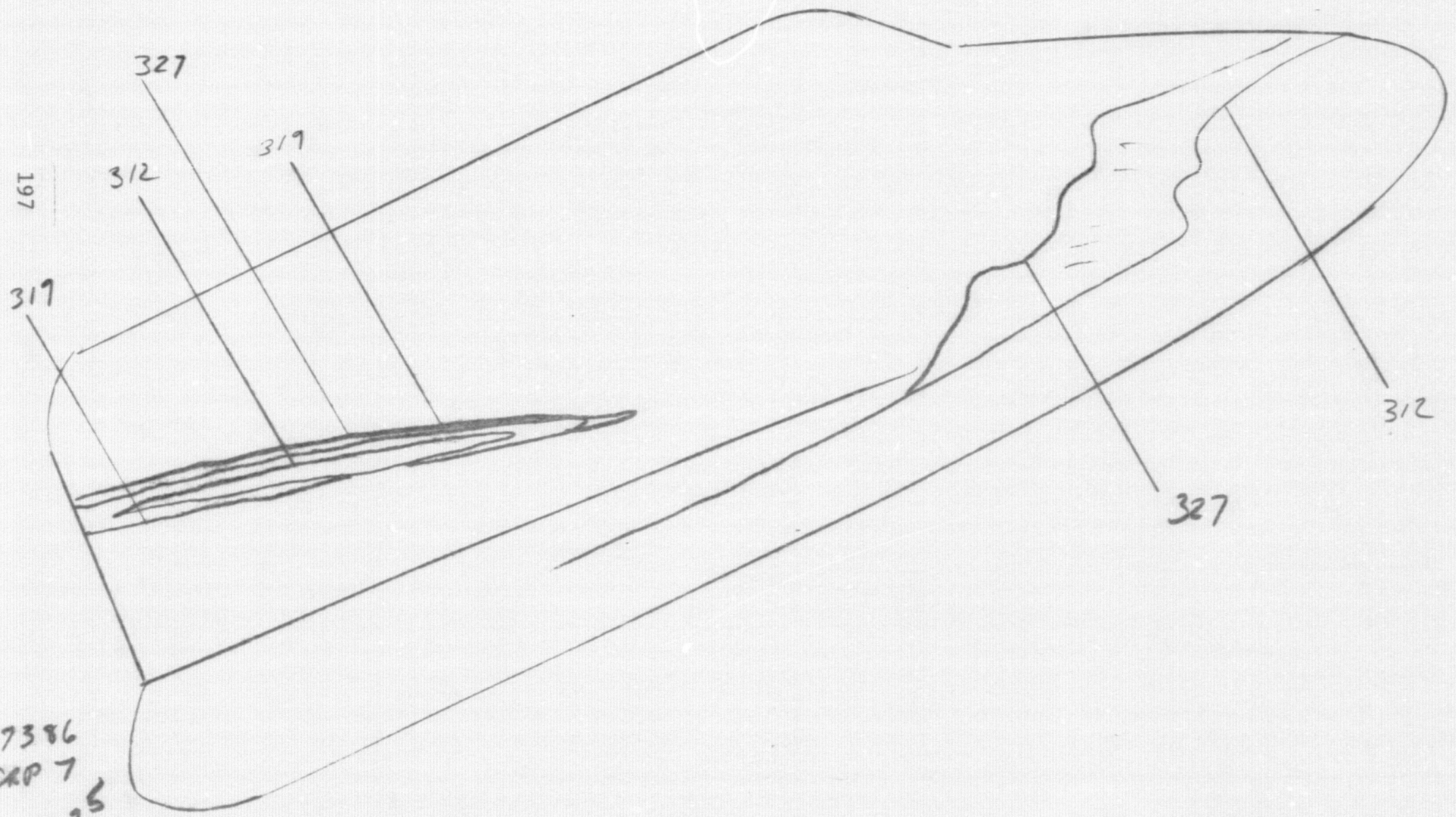
VA526

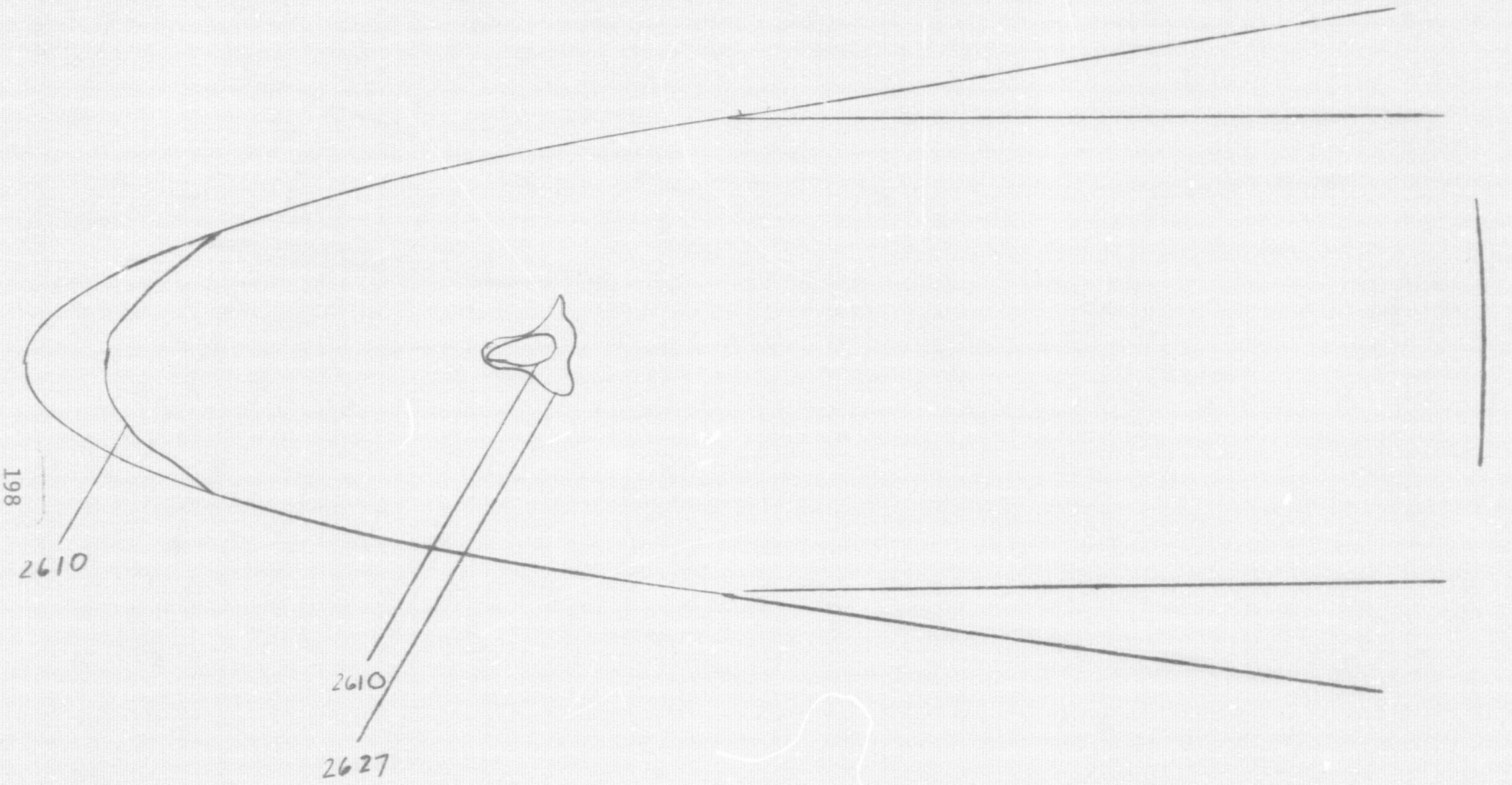
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
6	1	7.90	105.7	1261	29.96	.03	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RF/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.012	.513	3744	1.054E-05	7.531E-08	5.239E 05	1.158E-02	3.703E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	78	.0486	4.839E-02	4.4603E-02
OP SIDE(OS)	7386	113	78	.0486	4.839E-02	4.4603E-02
BOTTOM(BOT)	7514	113	78	.0486	4.839E-02	4.4603E-02
TOP(TOP)	8436	113	78	.0486	4.839E-02	4.4603E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5487(113)	37.24	36.25	3.601E-04	.0311	4.395E-04	.0380	4.945E-04	.0427	1.142E-03
OS 287(113)	37.24	36.25	3.601E-04	.0311	4.395E-04	.0380	4.945E-04	.0427	1.142E-03
BOT 2587(113)	37.24	36.25	3.601E-04	.0311	4.395E-04	.0380	4.945E-04	.0427	1.142E-03
NOS 6987(113)	37.24	36.25	3.601E-04	.0311	4.395E-04	.0380	4.945E-04	.0427	1.142E-03
TOP 5488(113)	38.32	37.32	3.548E-04	.0306	4.331E-04	.0374	4.873E-04	.0421	1.126E-03
OS 288(113)	38.32	37.32	3.548E-04	.0306	4.331E-04	.0374	4.873E-04	.0421	1.126E-03
BOT 2588(113)	38.32	37.32	3.548E-04	.0306	4.331E-04	.0374	4.873E-04	.0421	1.126E-03
NOS 6988(113)	38.32	37.32	3.548E-04	.0306	4.331E-04	.0374	4.873E-04	.0421	1.126E-03
TOP 5489(113)	39.42	38.42	3.497E-04	.0302	4.269E-04	.0369	4.803E-04	.0415	1.110E-03
OS 289(113)	39.42	38.42	3.497E-04	.0302	4.269E-04	.0369	4.803E-04	.0415	1.110E-03
BOT 2589(113)	39.42	38.42	3.497E-04	.0302	4.269E-04	.0369	4.803E-04	.0415	1.110E-03
NOS 6989(113)	39.42	38.42	3.497E-04	.0302	4.269E-04	.0369	4.803E-04	.0415	1.110E-03
TOP 5490(113)	40.52	39.52	3.448E-04	.0298	4.209E-04	.0364	4.735E-04	.0409	1.094E-03
OS 290(113)	40.52	39.52	3.448E-04	.0298	4.209E-04	.0364	4.735E-04	.0409	1.094E-03
BOT 2590(113)	40.52	39.52	3.448E-04	.0298	4.209E-04	.0364	4.735E-04	.0409	1.094E-03
NOS 6990(113)	40.52	39.52	3.448E-04	.0298	4.209E-04	.0364	4.735E-04	.0409	1.094E-03
BOT 2591(113)	41.60	40.60	3.402E-04	.0294	4.153E-04	.0359	4.672E-04	.0404	1.079E-03
TOP 5491(113)	41.62	40.63	3.401E-04	.0296	4.151E-04	.0358	4.671E-04	.0403	1.078E-03
OS 291(113)	41.62	40.63	3.401E-04	.0294	4.151E-04	.0358	4.671E-04	.0403	1.078E-03
NOS 6991(113)	41.62	40.63	3.401E-04	.0294	4.151E-04	.0358	4.671E-04	.0403	1.078E-03
	41.77		MODEL HAS LEFT CENTERLINE						
TOP 5492(113)	42.70	41.70	3.357E-04	.0290	4.098E-04	.0354	4.610E-04	.0398	1.066E-03
OS 292(113)	42.70	41.70	3.357E-04	.0290	4.098E-04	.0354	4.610E-04	.0398	1.066E-03
BOT 2592(113)	42.70	41.70	3.357E-04	.0290	4.098E-04	.0354	4.610E-04	.0398	1.066E-03
NOS 6992(113)	42.70	41.70	3.357E-04	.0290	4.098E-04	.0354	4.610E-04	.0398	1.066E-03


327
312
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197
319
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7386
GRP 7
L=25



7514
ORF 7 $\alpha = 25$
$R = .5$

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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3/29/74

NASA-R1 OHSO — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VAS26 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
7	1	7.90	104.6	1256	25.01	4.99	30.60	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.2	.412	.507	3737	1.045E-05	7.502E-08	5.205E 05	1.150E-02	3.717E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	80	.0486	0	0
UP SIDE(OS)	7386	113	80	.0486	0	0
MOTTOM(BOT)	7514	113	80	.0486	0	0
TOP(TOP)	8436	113	80	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	SI(TO)
TO 5493(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 2593(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 293(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 5494(113)	1.08		MODEL HAS NOT REACHED CENTERLINE						
OS 294(113)	1.08		MODEL HAS NOT REACHED CENTERLINE						
HO 2594(113)	1.08		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 5495(113)	2.15	1.14	1.928E-03	.1678	2.358E-03	.2052	2.654E-03	.2310	6.190E-03
OS 295(113)	2.15	1.14	1.928E-03	.1678	2.358E-03	.2052	2.654E-03	.2310	6.190E-03
HOT 2595(113)	2.15	1.14	1.928E-03	.1678	2.358E-03	.2052	2.654E-03	.2310	6.190E-03
TOP 5496(113)	3.23	2.22	1.383E-03	.1202	1.691E-03	.1470	1.904E-03	.1655	4.432E-03
OS 296(113)	3.23	2.22	1.383E-03	.1202	1.691E-03	.1470	1.904E-03	.1655	4.432E-03
HOT 2596(113)	3.23	2.22	1.383E-03	.1202	1.691E-03	.1470	1.904E-03	.1655	4.432E-03
TOP 5497(113)	4.30	3.29	1.135E-03	.0987	1.388E-03	.1207	1.562E-03	.1359	3.640E-03
OS 297(113)	4.30	3.29	1.135E-03	.0987	1.388E-03	.1207	1.562E-03	.1359	3.640E-03
HOT 2597(113)	4.30	3.29	1.135E-03	.0987	1.388E-03	.1207	1.562E-03	.1359	3.640E-03
TOP 5498(113)	5.38	4.37	9.851E-04	.0856	1.205E-03	.1047	1.356E-03	.1179	3.157E-03
OS 298(113)	5.38	4.37	9.851E-04	.0856	1.205E-03	.1047	1.356E-03	.1179	3.157E-03
HOT 2598(113)	5.38	4.37	9.851E-04	.0856	1.205E-03	.1047	1.356E-03	.1179	3.157E-03
HOT 2599(113)	6.46	5.45	8.824E-04	.0767	1.079E-03	.0938	1.215E-03	.1056	2.828E-03
TOP 5499(113)	6.48	5.47	8.804E-04	.0765	1.077E-03	.0936	1.212E-03	.1054	2.821E-03
OS 299(113)	6.48	5.47	8.804E-04	.0765	1.077E-03	.0936	1.212E-03	.1054	2.821E-03
HOT 2600(113)	7.53	6.52	8.067E-04	.0701	9.860E-04	.0857	1.110E-03	.0965	2.581E-03
TOP 5500(113)	7.56	6.55	8.048E-04	.0699	9.841E-04	.0855	1.108E-03	.0963	2.576E-03
OS 300(113)	7.56	6.55	8.048E-04	.0699	9.841E-04	.0855	1.108E-03	.0963	2.576E-03
TOP 5501(113)	8.63	7.62	7.458E-04	.0648	9.120E-04	.0792	1.027E-03	.0892	2.388E-03
OS 301(113)	8.63	7.62	7.458E-04	.0648	9.120E-04	.0792	1.027E-03	.0892	2.388E-03
HOT 2601(113)	8.63	7.62	7.458E-04	.0648	9.120E-04	.0792	1.027E-03	.0892	2.388E-03

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3/29/74

NASA-RI OH50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VAS26 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
7	1	7.90	104.6	1256	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
93.2	.012	.508	3737	1.047E-05	7.502E-08	5.214E 05	1.151E-02	3.713E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	80	.0486	4.608E-02	4.2372E-02
OP SIDE(OS)	7386	113	80	.0486	4.608E-02	4.2372E-02
HOT(CM(BOT)	7514	113	80	.0486	4.608E-02	4.2372E-02
TOP(TOP)	8436	113	80	.0486	4.608E-02	4.2372E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5502(113)	9.71	8.70	6.982E-04	.0607	8.537E-04	.0742	9.612E-04	.0835	2.235E-03
OS 302(113)	9.71	8.70	6.982E-04	.0607	8.537E-04	.0742	9.612E-04	.0835	2.235E-03
HOT 2602(113)	9.71	8.70	6.982E-04	.0607	8.537E-04	.0742	9.612E-04	.0835	2.235E-03
TOP 5503(113)	10.79	9.78	6.586E-04	.0573	8.054E-04	.0700	9.068E-04	.0788	2.110E-03
OS 303(113)	10.79	9.78	6.586E-04	.0573	8.054E-04	.0700	9.068E-04	.0788	2.110E-03
HOT 2603(113)	10.79	9.78	6.586E-04	.0573	8.054E-04	.0700	9.068E-04	.0788	2.110E-03
TOP 5504(113)	11.86	10.85	6.251E-04	.0543	7.644E-04	.0664	8.606E-04	.0747	1.999E-03
OS 304(113)	11.86	10.85	6.251E-04	.0543	7.644E-04	.0664	8.606E-04	.0747	1.999E-03
HOT 2604(113)	11.86	10.85	6.251E-04	.0543	7.644E-04	.0664	8.606E-04	.0747	1.999E-03
TOP 5505(113)	12.94	11.93	5.962E-04	.0518	7.291E-04	.0634	8.209E-04	.0713	1.909E-03
OS 305(113)	12.94	11.93	5.962E-04	.0518	7.291E-04	.0634	8.209E-04	.0713	1.909E-03
HOT 2605(113)	12.94	11.93	5.962E-04	.0518	7.291E-04	.0634	8.209E-04	.0713	1.909E-03
TOP 5506(113)	14.02	13.00	5.710E-04	.0496	6.983E-04	.0606	7.862E-04	.0682	1.825E-03
HOT 2606(113)	14.02	13.00	5.710E-04	.0496	6.983E-04	.0606	7.862E-04	.0682	1.825E-03
OS 306(113)	14.04	13.03	5.705E-04	.0496	6.976E-04	.0606	7.854E-04	.0682	1.826E-03
TOP 5507(113)	15.09	14.08	5.488E-04	.0477	6.711E-04	.0583	7.556E-04	.0656	1.755E-03
OS 307(113)	15.12	14.11	5.483E-04	.0476	6.705E-04	.0582	7.549E-04	.0655	1.752E-03
HOT 2607(113)	15.12	14.11	5.483E-04	.0476	6.705E-04	.0582	7.549E-04	.0655	1.752E-03
TOP 5508(113)	16.19	15.18	5.285E-04	.0459	6.463E-04	.0561	7.276E-04	.0632	1.689E-03
OS 308(113)	16.19	15.18	5.285E-04	.0459	6.463E-04	.0561	7.276E-04	.0632	1.689E-03
HOT 2608(113)	16.19	15.18	5.285E-04	.0459	6.463E-04	.0561	7.276E-04	.0632	1.689E-03
TOP 5509(113)	17.27	16.26	5.107E-04	.0443	6.245E-04	.0542	7.031E-04	.0610	1.630E-03
OS 309(113)	17.27	16.26	5.107E-04	.0443	6.245E-04	.0542	7.031E-04	.0610	1.630E-03
HOT 2609(113)	17.27	16.26	5.107E-04	.0443	6.245E-04	.0542	7.031E-04	.0610	1.630E-03
TOP 5510(113)	18.35	17.33	4.946E-04	.0429	6.048E-04	.0525	6.810E-04	.0591	1.579E-03
OS 310(113)	18.35	17.33	4.946E-04	.0429	6.048E-04	.0525	6.810E-04	.0591	1.579E-03
HOT 2610(113)	18.35	17.33	4.946E-04	.0429	6.048E-04	.0525	6.810E-04	.0591	1.579E-03

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NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
7	1	7.90	104.9	1256	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
93.2	.012	.509	3736	1.050E-05	7.501E-08	5.230E 05	1.153E-02	3.708E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	80	.0486	4.608E-02	4.2372E-02
OP SIDE(OS)	7386	113	80	.0486	4.608E-02	4.2372E-02
HOTTOM(BOT)	7514	113	80	.0486	4.608E-02	4.2372E-02
TOP(TOP)	8436	113	80	.0486	4.608E-02	4.2372E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5511(113)	19.42	18.41	4.799E-04	.0416	5.869E-04	.0509	6.608E-04	.0573	1.532E-03
OS 311(113)	19.42	18.41	4.799E-04	.0416	5.869E-04	.0509	6.608E-04	.0573	1.532E-03
HOT 2611(113)	19.42	18.41	4.799E-04	.0416	5.869E-04	.0509	6.608E-04	.0573	1.532E-03
TOP 5512(113)	20.50	19.49	4.665E-04	.0405	5.704E-04	.0495	6.422E-04	.0557	1.488E-03
OS 312(113)	20.50	19.49	4.665E-04	.0405	5.704E-04	.0495	6.422E-04	.0557	1.488E-03
HOT 2612(113)	20.50	19.49	4.665E-04	.0405	5.704E-04	.0495	6.422E-04	.0557	1.488E-03
TOP 5513(113)	21.57	20.56	4.541E-04	.0394	5.553E-04	.0482	6.252E-04	.0542	1.448E-03
HOT 2613(113)	21.57	20.56	4.541E-04	.0394	5.553E-04	.0482	6.252E-04	.0542	1.448E-03
OS 313(113)	21.60	20.59	4.538E-04	.0393	5.550E-04	.0481	6.248E-04	.0542	1.446E-03
HOT 2614(113)	22.65	21.64	4.427E-04	.0384	5.413E-04	.0469	6.095E-04	.0528	1.410E-03
TOP 5514(113)	22.68	21.66	4.424E-04	.0384	5.410E-04	.0469	6.091E-04	.0528	1.411E-03
OS 314(113)	22.68	21.66	4.424E-04	.0384	5.410E-04	.0469	6.091E-04	.0528	1.411E-03
TOP 5515(113)	23.75	22.74	4.318E-04	.0374	5.280E-04	.0458	5.945E-04	.0515	1.376E-03
OS 315(113)	23.75	22.74	4.318E-04	.0374	5.280E-04	.0458	5.945E-04	.0515	1.376E-03
HOT 2615(113)	23.75	22.74	4.318E-04	.0374	5.280E-04	.0458	5.945E-04	.0515	1.376E-03
TOP 5516(113)	24.83	23.82	4.220E-04	.0366	5.160E-04	.0447	5.809E-04	.0504	1.344E-03
OS 316(113)	24.83	23.82	4.220E-04	.0366	5.160E-04	.0447	5.809E-04	.0504	1.344E-03
HOT 2616(113)	24.83	23.82	4.220E-04	.0366	5.160E-04	.0447	5.809E-04	.0504	1.344E-03
TOP 5517(113)	25.90	24.89	4.127E-04	.0357	5.047E-04	.0437	5.682E-04	.0492	1.312E-03
OS 317(113)	25.90	24.89	4.127E-04	.0357	5.047E-04	.0437	5.682E-04	.0492	1.312E-03
HOT 2617(113)	25.90	24.89	4.127E-04	.0357	5.047E-04	.0437	5.682E-04	.0492	1.312E-03
TOP 5518(113)	26.98	25.97	4.041E-04	.0350	4.941E-04	.0428	5.563E-04	.0482	1.286E-03
OS 318(113)	26.98	25.97	4.041E-04	.0350	4.941E-04	.0428	5.563E-04	.0482	1.286E-03
HOT 2618(113)	26.98	25.97	4.041E-04	.0350	4.941E-04	.0428	5.563E-04	.0482	1.286E-03
TOP 5519(113)	28.06	27.05	3.960E-04	.0343	4.842E-04	.0419	5.452E-04	.0472	1.259E-03
OS 319(113)	28.06	27.05	3.960E-04	.0343	4.842E-04	.0419	5.452E-04	.0472	1.259E-03
HOT 2619(113)	28.06	27.05	3.960E-04	.0343	4.842E-04	.0419	5.452E-04	.0472	1.259E-03

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
7	1	7.90	105.3	1256	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.2	.012	.511	3737	1.054E-05	7.502E-08	5.250E 05	1.155E-02	3.701E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	80	.0486	4.608E-02	4.2372E-02
UP SIDE(OS)	7286	113	80	.0486	4.608E-02	4.2372E-02
BOTTOM(BOT)	7514	113	80	.0486	4.608E-02	4.2372E-02
TOP(TOP)	8436	113	80	.0486	4.608E-02	4.2372E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5520(113)	29.13	28.12	3.883E-04	.0336	4.748E-04	.0411	5.346E-04	.0463	1.235E-03
OS 320(113)	29.16	28.15	3.881E-04	.0336	4.746E-04	.0411	5.344E-04	.0463	1.234E-03
BOT 2620(113)	29.16	28.15	3.881E-04	.0336	4.746E-04	.0411	5.344E-04	.0463	1.234E-03
BOT 2621(113)	30.21	29.20	3.811E-04	.0330	4.660E-04	.0404	5.247E-04	.0454	1.212E-03
TOP 5521(113)	30.23	29.22	3.809E-04	.0330	4.658E-04	.0403	5.245E-04	.0454	1.211E-03
OS 321(113)	30.23	29.22	3.809E-04	.0330	4.658E-04	.0403	5.245E-04	.0454	1.211E-03
TOP 5522(113)	31.31	30.30	3.741E-04	.0324	4.575E-04	.0396	5.151E-04	.0446	1.188E-03
OS 322(113)	31.31	30.30	3.741E-04	.0324	4.575E-04	.0396	5.151E-04	.0446	1.188E-03
BOT 2622(113)	31.31	30.30	3.741E-04	.0324	4.575E-04	.0396	5.151E-04	.0446	1.188E-03
TOP 5523(113)	32.39	31.38	3.676E-04	.0318	4.496E-04	.0389	5.061E-04	.0438	1.168E-03
OS 323(113)	32.39	31.38	3.676E-04	.0318	4.496E-04	.0389	5.061E-04	.0438	1.168E-03
BOT 2623(113)	32.39	31.38	3.676E-04	.0318	4.496E-04	.0389	5.061E-04	.0438	1.168E-03
TOP 5524(113)	33.46	32.45	3.615E-04	.0313	4.420E-04	.0383	4.977E-04	.0431	1.148E-03
OS 324(113)	33.46	32.45	3.615E-04	.0313	4.420E-04	.0383	4.977E-04	.0431	1.148E-03
BOT 2624(113)	33.46	32.45	3.615E-04	.0313	4.420E-04	.0383	4.977E-04	.0431	1.148E-03
TOP 5525(113)	34.54	33.53	3.556E-04	.0308	4.349E-04	.0376	4.896E-04	.0424	1.129E-03
OS 325(113)	34.54	33.53	3.556E-04	.0308	4.349E-04	.0376	4.896E-04	.0424	1.129E-03
BOT 2625(113)	34.54	33.53	3.556E-04	.0308	4.349E-04	.0376	4.896E-04	.0424	1.129E-03
TOP 5526(113)	35.62	34.60	3.501E-04	.0303	4.281E-04	.0371	4.820E-04	.0417	1.112E-03
OS 326(113)	35.62	34.60	3.501E-04	.0303	4.281E-04	.0371	4.820E-04	.0417	1.112E-03
BOT 2626(113)	35.62	34.60	3.501E-04	.0303	4.281E-04	.0371	4.820E-04	.0417	1.112E-03
OS 327(113)	36.69	35.68	3.447E-04	.0298	4.216E-04	.0365	4.746E-04	.0411	1.092E-03
BOT 2627(113)	36.69	35.68	3.447E-04	.0298	4.216E-04	.0365	4.746E-04	.0411	1.092E-03
TOP 5527(113)	36.72	35.71	3.446E-04	.0298	4.214E-04	.0365	4.745E-04	.0411	1.093E-03
BOT 2628(113)	37.77	36.76	3.397E-04	.0294	4.153E-04	.0359	4.676E-04	.0405	1.078E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VAS26 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
7	1	7.90	105.5	1256	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.2	.012	.512	3736	1.056E-05	7.501E-08	5.261E 05	1.156E-02	3.697E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7610	113	80	.0486	4.608E-02	4.2372E-02
UP SIDE(OS)	7386	113	80	.0486	4.608E-02	4.2372E-02
BOTTOM(BOT)	7514	113	80	.0486	4.608E-02	4.2372E-02
TOP(TOP)	8436	113	80	.0486	4.608E-02	4.2372E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5528(113)	37.79	36.78	3.395E-04	.0294	4.152E-04	.0359	4.675E-04	.0404	1.077E-03
OS 328(113)	37.79	36.78	3.395E-04	.0294	4.152E-04	.0359	4.675E-04	.0404	1.077E-03
	38.59		MODEL HAS LEFT CENTERLINE						
TOP 5529(113)	38.87	37.86	3.347E-04	.0289	4.093E-04	.0354	4.608E-04	.0398	1.061E-03
OS 329(113)	38.87	37.86	3.347E-04	.0289	4.093E-04	.0354	4.608E-04	.0398	1.061E-03
HOT 2629(113)	38.87	37.86	3.347E-04	.0289	4.093E-04	.0354	4.608E-04	.0398	1.061E-03
TOP 5530(113)	39.95	38.93	3.300E-04	.0285	4.036E-04	.0349	4.544E-04	.0393	1.046E-03
OS 330(113)	39.95	38.93	3.300E-04	.0285	4.036E-04	.0349	4.544E-04	.0393	1.046E-03
HOT 2630(113)	39.95	38.93	3.300E-04	.0285	4.036E-04	.0349	4.544E-04	.0393	1.046E-03
TOP 5531(113)	41.02	40.01	3.256E-04	.0281	3.981E-04	.0344	4.482E-04	.0387	1.031E-03
OS 331(113)	41.02	40.01	3.256E-04	.0281	3.981E-04	.0344	4.482E-04	.0387	1.031E-03
HOT 2631(113)	41.02	40.01	3.256E-04	.0281	3.981E-04	.0344	4.482E-04	.0387	1.031E-03
TOP 5532(113)	42.10	41.09	3.213E-04	.0278	3.928E-04	.0340	4.423E-04	.0382	1.018E-03
OS 332(113)	42.10	41.09	3.213E-04	.0278	3.928E-04	.0340	4.423E-04	.0382	1.018E-03
HOT 2632(113)	42.10	41.09	3.213E-04	.0278	3.928E-04	.0340	4.423E-04	.0382	1.018E-03
TOP 5533(113)	43.17	42.16	3.171E-04	.0274	3.878E-04	.0335	4.366E-04	.0377	1.004E-03
OS 333(113)	43.17	42.16	3.171E-04	.0274	3.878E-04	.0335	4.366E-04	.0377	1.004E-03
HOT 2633(113)	43.17	42.16	3.171E-04	.0274	3.878E-04	.0335	4.366E-04	.0377	1.004E-03
HOT 2634(113)	44.25	43.24	3.132E-04	.0271	3.829E-04	.0331	4.312E-04	.0373	9.929E-04
TOP 5534(113)	44.28	43.26	3.131E-04	.0271	3.828E-04	.0331	4.310E-04	.0373	9.917E-04
OS 334(113)	44.28	43.26	3.131E-04	.0271	3.828E-04	.0331	4.310E-04	.0373	9.917E-04
TOP 5535(113)	45.35	44.34	3.093E-04	.0267	3.782E-04	.0327	4.258E-04	.0368	9.805E-04
OS 335(113)	45.35	44.34	3.093E-04	.0267	3.782E-04	.0327	4.258E-04	.0368	9.805E-04
HOT 2635(113)	45.35	44.34	3.093E-04	.0267	3.782E-04	.0327	4.258E-04	.0368	9.805E-04
TOP 5536(113)	46.43	45.42	3.056E-04	.0264	3.737E-04	.0323	4.207E-04	.0363	9.669E-04
OS 336(113)	46.43	45.42	3.056E-04	.0264	3.737E-04	.0323	4.207E-04	.0363	9.669E-04
HOT 2636(113)	46.43	45.42	3.056E-04	.0264	3.737E-04	.0323	4.207E-04	.0363	9.669E-04

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

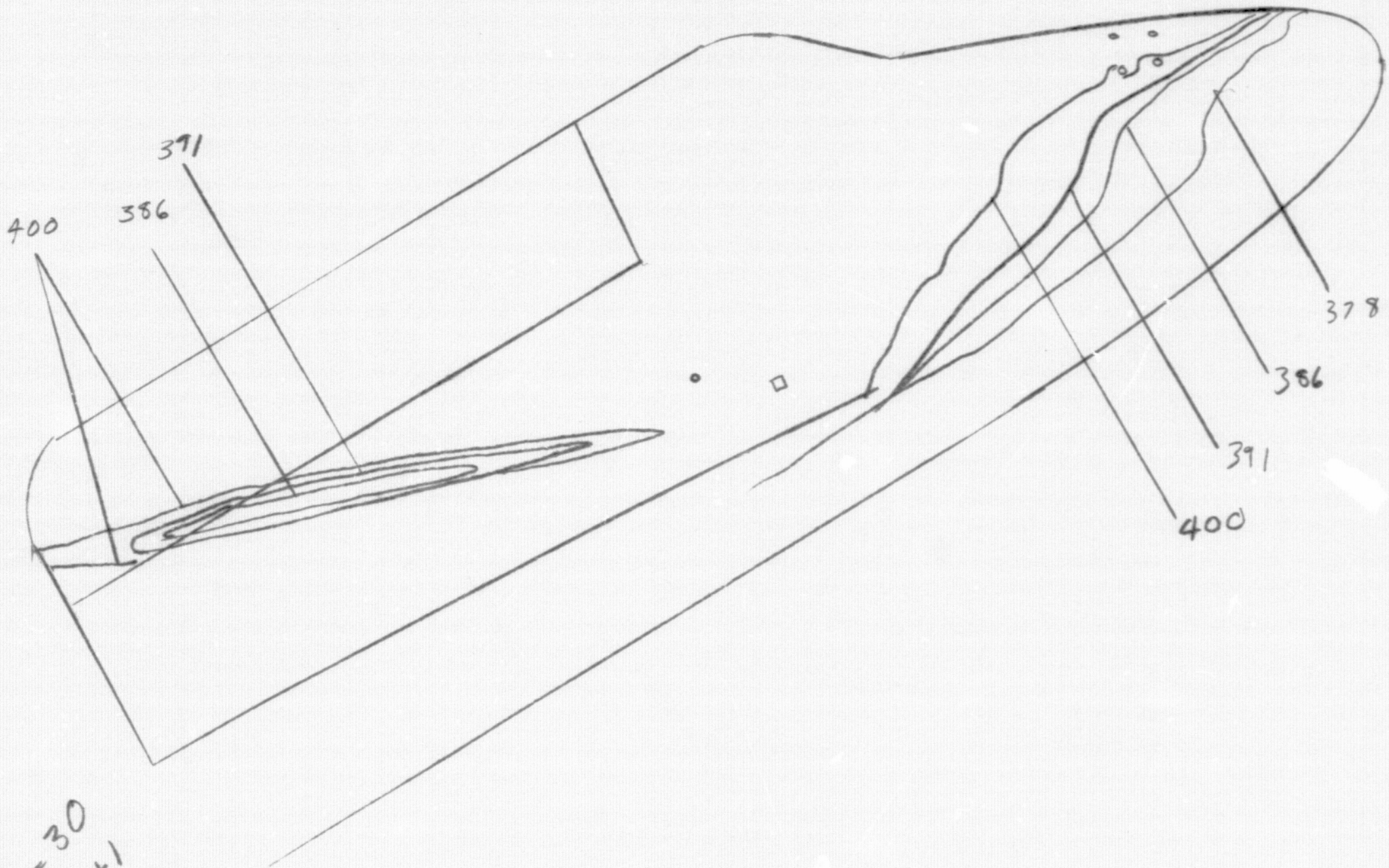
VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
7	1	7.90	105.8	1256	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.2	.012	.514	3736	1.059E-05	7.501E-08	5.276E 05	1.157E-02	3.692E-02

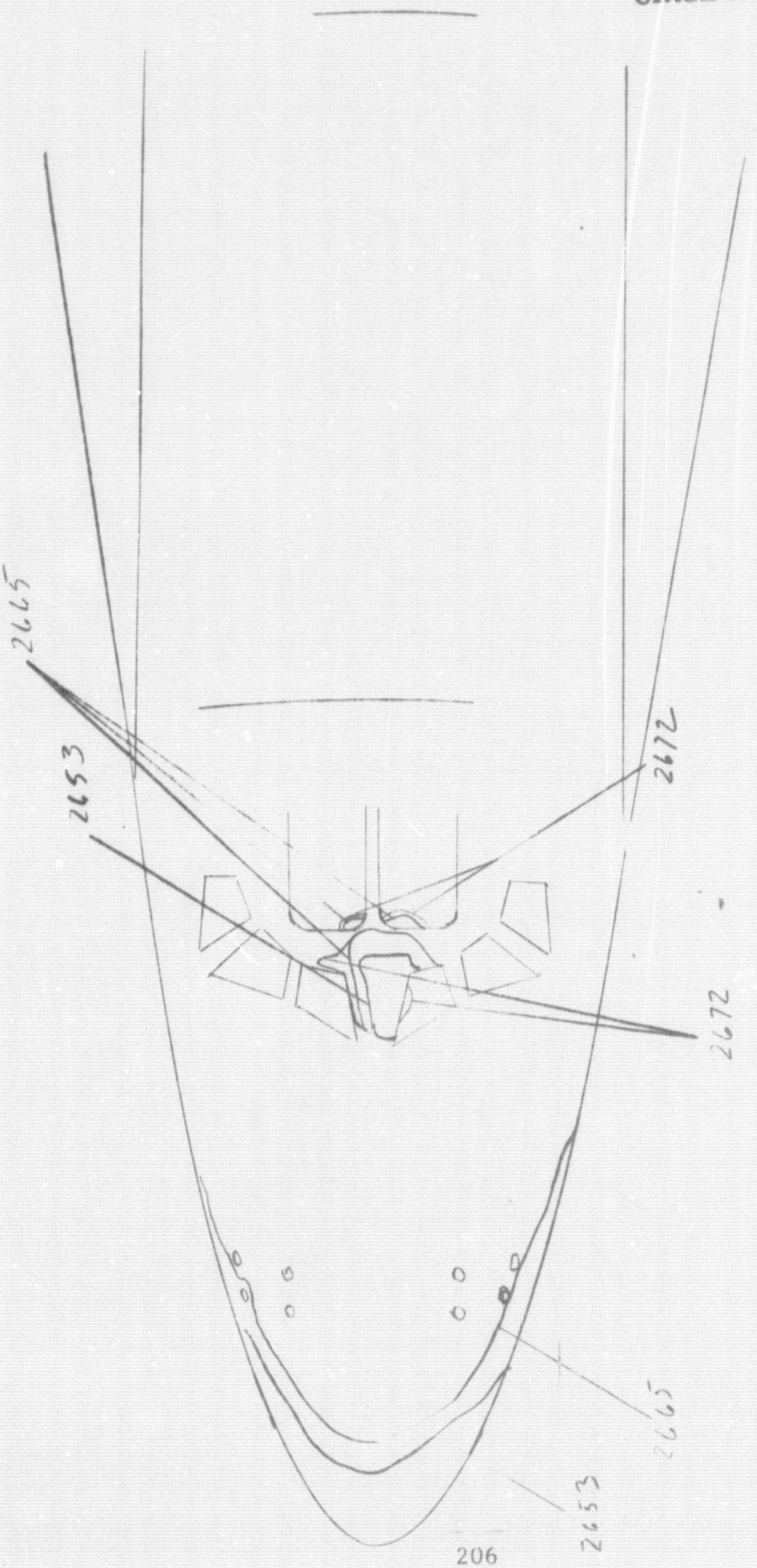
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7610	113	80	.0486	4.608E-02	4.2372E-02
OP SIDE(OS)	7386	113	80	.0486	4.608E-02	4.2372E-02
BOTTOM(BOT)	7514	113	80	.0486	4.608E-02	4.2372E-02
TOP(TOP)	8436	113	80	.0486	4.608E-02	4.2372E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5537(113)	47.50	46.49	3.020E-04	.0261	3.693E-04	.0319	4.158E-04	.0359	9.557E-04
OS 337(113)	47.50	46.49	3.020E-04	.0261	3.693E-04	.0319	4.158E-04	.0359	9.557E-04
BOT 2637(113)	47.50	46.49	3.020E-04	.0261	3.693E-04	.0319	4.158E-04	.0359	9.557E-04
TOP 5538(113)	48.58	47.57	2.986E-04	.0258	3.651E-04	.0315	4.111E-04	.0355	9.448E-04
OS 338(113)	48.58	47.57	2.986E-04	.0258	3.651E-04	.0315	4.111E-04	.0355	9.448E-04
BOT 2638(113)	48.58	47.57	2.986E-04	.0258	3.651E-04	.0315	4.111E-04	.0355	9.448E-04

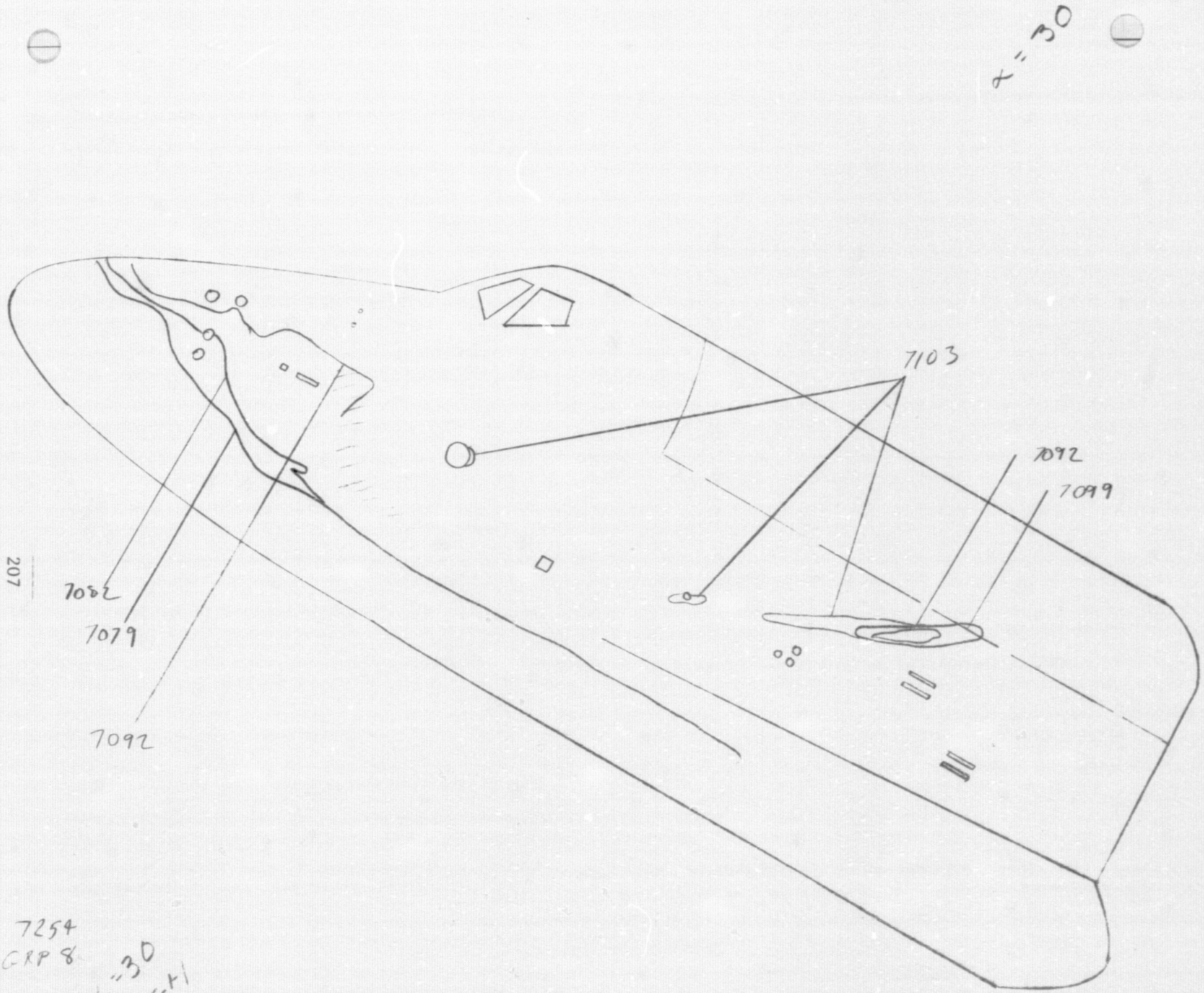


8410
GRP 8
$\alpha = 30$
$\beta = \pm 1$

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



7514
GRP 8



207

7254
CRP 8
α = 30
β = +1

NASA-RI ON50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
8	1	7.90	106.2	1249	29.98	0	30.00	2.00	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.6	.012	.516	3726	1.045E-05	7.458E-08	5.342E 05	1.159E-02	3.672E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	YBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	80	.0486	0	0
OP SIDE(OS)	8410	113	80	.0486	0	0
BOTTOM(BOT)	7514	113	80	.0486	0	0
TOP(TOP)	7539	113	80	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 5569(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
BO 2639(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
US 369(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 7069(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
IO 5570(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
US 370(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 2640(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7070(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 5571(113)	2.18	1.17	1.928E-03	.1664	2.361E-03	.2038	2.657E-03	.2293	6.062E-03
US 371(113)	2.20	1.19	1.907E-03	.1646	2.336E-03	.2015	2.629E-03	.2268	5.992E-03
BOT 2641(113)	2.20	1.19	1.907E-03	.1646	2.336E-03	.2015	2.629E-03	.2268	5.992E-03
NOS 7071(113)	2.20	1.19	1.907E-03	.1646	2.336E-03	.2015	2.629E-03	.2268	5.992E-03
TOP 5572(113)	3.28	2.27	1.382E-03	.1193	1.693E-03	.1461	1.905E-03	.1644	4.347E-03
US 372(113)	3.28	2.27	1.382E-03	.1193	1.693E-03	.1461	1.905E-03	.1644	4.347E-03
BOT 2642(113)	3.28	2.27	1.382E-03	.1193	1.693E-03	.1461	1.905E-03	.1644	4.347E-03
NOS 7072(113)	3.28	2.27	1.382E-03	.1193	1.693E-03	.1461	1.905E-03	.1644	4.347E-03
TOP 5573(113)	4.38	3.37	1.134E-03	.0979	1.389E-03	.1199	1.563E-03	.1349	3.566E-03
US 373(113)	4.38	3.37	1.134E-03	.0979	1.389E-03	.1199	1.563E-03	.1349	3.566E-03
BOT 2643(113)	4.38	3.37	1.134E-03	.0979	1.389E-03	.1199	1.563E-03	.1349	3.566E-03
NOS 7073(113)	4.38	3.37	1.134E-03	.0979	1.389E-03	.1199	1.563E-03	.1349	3.566E-03
TOP 5574(113)	5.48	4.47	9.846E-04	.0850	1.206E-03	.1041	1.357E-03	.1171	3.096E-03
US 374(113)	5.48	4.47	9.846E-04	.0850	1.206E-03	.1041	1.357E-03	.1171	3.096E-03
BOT 2644(113)	5.48	4.47	9.846E-04	.0850	1.206E-03	.1041	1.357E-03	.1171	3.096E-03
NOS 7074(113)	5.49	4.47	9.846E-04	.0850	1.206E-03	.1041	1.357E-03	.1171	3.096E-03
TOP 5575(113)	6.58	5.57	8.819E-04	.0761	1.080E-03	.0932	1.215E-03	.1049	2.773E-03
US 375(113)	6.58	5.57	8.819E-04	.0761	1.080E-03	.0932	1.215E-03	.1049	2.773E-03
BOT 2645(113)	6.58	5.57	8.819E-04	.0761	1.080E-03	.0932	1.215E-03	.1049	2.773E-03
NOS 7075(113)	6.58	5.57	8.819E-04	.0761	1.080E-03	.0932	1.215E-03	.1049	2.773E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

* UNCLASSIFIED *

3/29/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PRESEND	ROLL-MODEL	YAW
8	1	7.90	106.2	1249	29.98	0	30.00	2.00	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.6	.012	.516	3726	1.069E-05	7.457E-08	5.342E 05	1.159E-02	3.672E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TEAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	80	.0486	4.656E-02	4.2830E-02
OP SIDE(OS)	8410	113	80	.0486	4.656E-02	4.2830E-02
BOTTOM(BOT)	7514	113	80	.0486	4.656E-02	4.2830E-02
TOP(TOP)	7539	113	80	.0486	4.656E-02	4.2830E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5576(113)	7.68	6.67	8.058E-04	.0695	9.867E-04	.0851	1.111E-03	.0958	2.532E-03
OS 376(113)	7.68	6.67	8.058E-04	.0695	9.867E-04	.0851	1.111E-03	.0958	2.532E-03
BOT 2646(113)	7.68	6.67	8.058E-04	.0695	9.867E-04	.0851	1.111E-03	.0958	2.532E-03
NOS 7076(113)	7.68	6.67	8.058E-04	.0695	9.867E-04	.0851	1.111E-03	.0958	2.532E-03
BOT 2647(113)	8.76	7.75	7.478E-04	.0646	9.156E-04	.0791	1.031E-03	.0890	2.354E-03
TOP 5577(113)	8.79	7.77	7.466E-04	.0644	9.141E-04	.0789	1.029E-03	.0888	2.345E-03
OS 377(113)	8.79	7.77	7.466E-04	.0644	9.141E-04	.0789	1.029E-03	.0888	2.345E-03
NOS 7077(113)	8.79	7.77	7.466E-04	.0644	9.141E-04	.0789	1.029E-03	.0888	2.345E-03
OS 378(113)	9.86	8.85	6.997E-04	.0604	8.568E-04	.0740	9.643E-04	.0833	2.202E-03
BOT 2648(113)	9.86	8.85	6.997E-04	.0604	8.568E-04	.0740	9.643E-04	.0833	2.202E-03
TOP 5578(113)	9.89	8.87	6.987E-04	.0603	8.555E-04	.0738	9.629E-04	.0831	2.195E-03
NOS 7078(113)	9.89	8.87	6.987E-04	.0603	8.555E-04	.0738	9.629E-04	.0831	2.195E-03
TOP 5579(113)	10.96	9.95	6.599E-04	.0570	8.080E-04	.0697	9.093E-04	.0785	2.075E-03
OS 379(113)	10.96	9.95	6.599E-04	.0570	8.080E-04	.0697	9.093E-04	.0785	2.075E-03
BOT 2649(113)	10.96	9.95	6.599E-04	.0570	8.080E-04	.0697	9.093E-04	.0785	2.075E-03
NOS 7079(113)	10.96	9.95	6.599E-04	.0570	8.080E-04	.0697	9.093E-04	.0785	2.075E-03
TOP 5580(113)	12.06	11.05	6.261E-04	.0540	7.666E-04	.0662	8.628E-04	.0745	1.969E-03
OS 380(113)	12.06	11.05	6.261E-04	.0540	7.666E-04	.0662	8.628E-04	.0745	1.969E-03
BOT 2650(113)	12.06	11.05	6.261E-04	.0540	7.666E-04	.0662	8.628E-04	.0745	1.969E-03
NOS 7080(113)	12.06	11.05	6.261E-04	.0540	7.666E-04	.0662	8.628E-04	.0745	1.969E-03
TOP 5581(113)	13.17	12.15	5.971E-04	.0515	7.311E-04	.0631	8.228E-04	.0710	1.877E-03
OS 381(113)	13.17	12.15	5.971E-04	.0515	7.311E-04	.0631	8.228E-04	.0710	1.877E-03
BOT 2651(113)	13.17	12.15	5.971E-04	.0515	7.311E-04	.0631	8.228E-04	.0710	1.877E-03
NOS 7081(113)	13.17	12.15	5.971E-04	.0515	7.311E-04	.0631	8.228E-04	.0710	1.877E-03
TOP 5582(113)	14.27	13.25	5.717E-04	.0493	7.001E-04	.0604	7.879E-04	.0680	1.796E-03
OS 382(113)	14.27	13.25	5.717E-04	.0493	7.001E-04	.0604	7.879E-04	.0680	1.796E-03
BOT 2652(113)	14.27	13.25	5.717E-04	.0493	7.001E-04	.0604	7.879E-04	.0680	1.796E-03
NOS 7082(113)	14.27	13.25	5.717E-04	.0493	7.001E-04	.0604	7.879E-04	.0680	1.796E-03

* UNCLASSIFIED *

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
8	1	7.90	106.3	1249	29.98	0	30.00	2.00	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.6	.012	.516	3725	1.070E-05	7.457E-08	5.348E 05	1.159E-02	3.670E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	80	.0486	4.656E-02	4.2830E-02
UP SIDE(US)	8410	113	80	.0486	4.656E-02	4.2830E-02
HOTTOM(BOT)	7514	113	80	.0486	4.656E-02	4.2830E-02
TOP(TOP)	7539	113	80	.0486	4.656E-02	4.2830E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5583(113)	15.37	14.36	5.494E-04	.0474	6.727E-04	.0580	7.571E-04	.0653	1.726E-03
US 383(113)	15.37	14.36	5.494E-04	.0474	6.727E-04	.0580	7.571E-04	.0653	1.726E-03
HOT 2653(113)	15.37	14.36	5.494E-04	.0474	6.727E-04	.0580	7.571E-04	.0653	1.726E-03
NOS 7083(113)	15.37	14.36	5.494E-04	.0474	6.727E-04	.0580	7.571E-04	.0653	1.726E-03
TOP 5584(113)	16.47	15.46	5.294E-04	.0457	6.483E-04	.0559	7.296E-04	.0629	1.663E-03
US 384(113)	16.47	15.46	5.294E-04	.0457	6.483E-04	.0559	7.296E-04	.0629	1.663E-03
HOT 2654(113)	16.47	15.46	5.294E-04	.0457	6.483E-04	.0559	7.296E-04	.0629	1.663E-03
NOS 7084(113)	16.47	15.46	5.294E-04	.0457	6.483E-04	.0559	7.296E-04	.0629	1.663E-03
HOT 2655(113)	17.55	16.53	5.119E-04	.0442	6.268E-04	.0541	7.055E-04	.0609	1.610E-03
TOP 5585(113)	17.57	16.56	5.115E-04	.0441	6.263E-04	.0540	7.049E-04	.0608	1.605E-03
US 385(113)	17.57	16.56	5.115E-04	.0441	6.263E-04	.0540	7.049E-04	.0608	1.605E-03
NOS 7085(113)	17.57	16.56	5.115E-04	.0441	6.263E-04	.0540	7.049E-04	.0608	1.605E-03
US 386(113)	18.65	17.63	4.957E-04	.0428	6.069E-04	.0524	6.831E-04	.0590	1.558E-03
HOT 2656(113)	18.65	17.63	4.957E-04	.0428	6.069E-04	.0524	6.831E-04	.0590	1.558E-03
TOP 5586(113)	18.67	17.66	4.953E-04	.0427	6.065E-04	.0523	6.826E-04	.0589	1.554E-03
NOS 7086(113)	18.67	17.66	4.953E-04	.0427	6.065E-04	.0523	6.826E-04	.0589	1.554E-03
TOP 5587(113)	19.75	18.74	4.809E-04	.0415	5.888E-04	.0508	6.627E-04	.0572	1.511E-03
US 387(113)	19.75	18.74	4.809E-04	.0415	5.888E-04	.0508	6.627E-04	.0572	1.511E-03
HOT 2657(113)	19.75	18.74	4.809E-04	.0415	5.888E-04	.0508	6.627E-04	.0572	1.511E-03
NOS 7087(113)	19.75	18.74	4.809E-04	.0415	5.888E-04	.0508	6.627E-04	.0572	1.511E-03
TOP 5588(113)	20.85	19.84	4.673E-04	.0403	5.722E-04	.0494	6.440E-04	.0556	1.468E-03
US 388(113)	20.85	19.84	4.673E-04	.0403	5.722E-04	.0494	6.440E-04	.0556	1.468E-03
HOT 2658(113)	20.85	19.84	4.673E-04	.0403	5.722E-04	.0494	6.440E-04	.0556	1.468E-03
NOS 7088(113)	20.85	19.84	4.673E-04	.0403	5.722E-04	.0494	6.440E-04	.0556	1.468E-03
TOP 5589(113)	21.95	20.94	4.549E-04	.0392	5.570E-04	.0481	6.269E-04	.0541	1.429E-03
US 389(113)	21.95	20.94	4.549E-04	.0392	5.570E-04	.0481	6.269E-04	.0541	1.429E-03
HOT 2659(113)	21.95	20.94	4.549E-04	.0392	5.570E-04	.0481	6.269E-04	.0541	1.429E-03
NOS 7089(113)	21.95	20.94	4.549E-04	.0392	5.570E-04	.0481	6.269E-04	.0541	1.429E-03

3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
8	1	7.90	106.3	1249	29.98	0	30.00	2.00	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.6	.012	.516	3725	1.071E-05	7.456E-08	5.349E 05	1.159E-02	3.670E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	80	.0486	4.656E-02	4.2830E-02
OP SIDE(OS)	8410	113	80	.0486	4.656E-02	4.2830E-02
BOTTOM(BOT)	7514	113	80	.0486	4.656E-02	4.2830E-02
TOP(TOP)	7339	113	80	.0486	4.656E-02	4.2630E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5590(113)	23.05	22.04	4.434E-04	.0382	5.429E-04	.0468	6.110E-04	.0527	1.392E-03
OS 390(113)	23.05	22.04	4.434E-04	.0382	5.429E-04	.0468	6.110E-04	.0527	1.392E-03
BOT 2660(113)	23.05	22.04	4.434E-04	.0382	5.429E-04	.0468	6.110E-04	.0527	1.392E-03
NOS 7090(113)	23.05	22.04	4.434E-04	.0382	5.429E-04	.0468	6.110E-04	.0527	1.392E-03
TOP 5591(113)	24.15	23.14	4.327E-04	.0373	5.298E-04	.0457	5.963E-04	.0514	1.359E-03
OS 391(113)	24.15	23.14	4.327E-04	.0373	5.298E-04	.0457	5.963E-04	.0514	1.359E-03
BOT 2661(113)	24.15	23.14	4.327E-04	.0373	5.298E-04	.0457	5.963E-04	.0514	1.359E-03
NOS 7091(113)	24.15	23.14	4.327E-04	.0373	5.298E-04	.0457	5.963E-04	.0514	1.359E-03
TOP 5592(113)	25.25	24.24	4.228E-04	.0365	5.176E-04	.0446	5.826E-04	.0502	1.327E-03
OS 392(113)	25.25	24.24	4.228E-04	.0365	5.176E-04	.0446	5.826E-04	.0502	1.327E-03
BOT 2662(113)	25.25	24.24	4.228E-04	.0365	5.176E-04	.0446	5.826E-04	.0502	1.327E-03
NOS 7092(113)	25.25	24.24	4.228E-04	.0365	5.176E-04	.0446	5.826E-04	.0502	1.327E-03
TOP 5593(113)	26.33	25.32	4.137E-04	.0357	5.065E-04	.0437	5.701E-04	.0492	1.301E-03
BOT 2663(113)	26.33	25.32	4.137E-04	.0357	5.065E-04	.0437	5.701E-04	.0492	1.301E-03
OS 393(113)	26.36	25.34	4.135E-04	.0357	5.063E-04	.0437	5.698E-04	.0491	1.298E-03
NOS 7093(113)	26.36	25.34	4.135E-04	.0357	5.063E-04	.0437	5.698E-04	.0491	1.298E-03
TOP 5594(113)	27.43	26.42	4.050E-04	.0349	4.959E-04	.0428	5.581E-04	.0482	1.272E-03
OS 394(113)	27.43	26.42	4.050E-04	.0349	4.959E-04	.0428	5.581E-04	.0482	1.272E-03
BOT 2664(113)	27.43	26.42	4.050E-04	.0349	4.959E-04	.0428	5.581E-04	.0482	1.272E-03
NOS 7094(113)	27.43	26.42	4.050E-04	.0349	4.959E-04	.0428	5.581E-04	.0482	1.272E-03
TOP 5595(113)	28.53	27.52	3.968E-04	.0342	4.858E-04	.0419	5.468E-04	.0472	1.246E-03
OS 395(113)	28.53	27.52	3.968E-04	.0342	4.858E-04	.0419	5.468E-04	.0472	1.246E-03
BOT 2665(113)	28.53	27.52	3.968E-04	.0342	4.858E-04	.0419	5.468E-04	.0472	1.246E-03
NOS 7095(113)	28.53	27.52	3.968E-04	.0342	4.858E-04	.0419	5.468E-04	.0472	1.246E-03
TOP 5596(113)	29.63	28.62	3.891E-04	.0336	4.764E-04	.0411	5.362E-04	.0462	1.221E-03
OS 396(113)	29.63	28.62	3.891E-04	.0336	4.764E-04	.0411	5.362E-04	.0462	1.221E-03
BOT 2666(113)	29.63	28.62	3.891E-04	.0336	4.764E-04	.0411	5.362E-04	.0462	1.221E-03
NOS 7096(113)	29.63	28.62	3.891E-04	.0336	4.764E-04	.0411	5.362E-04	.0462	1.221E-03

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NASA-R1 OH50

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PPEBEND	ROLL-MODEL	YAW
A	1	7.90	106.4	1249.	29.98	0	30.00	2.00	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.6	.012	.517	3725	1.072E-05	7.456E-08	5.354E 05	1.160E-02	3.668E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	80	.0486	4.656E-02	4.2830E-02
OP SIDE(OS)	8410	113	80	.0486	4.656E-02	4.2830E-02
BOTTOM(BOT)	7514	113	80	.0486	4.656E-02	4.2830E-02
TOP(TOP)	7539	113	80	.0486	4.656E-02	4.2830E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 5597(113)	30.71	29.70	3.820E-04	.0330	4.677E-04	.0404	5.264E-04	.0454	1.200E-03
OS 397(113)	30.74	29.72	3.818E-04	.0329	4.675E-04	.0403	5.261E-04	.0454	1.198E-03
BOT 2667(113)	30.74	29.72	3.818E-04	.0329	4.675E-04	.0403	5.261E-04	.0454	1.198E-03
NOS 7097(113)	30.74	29.72	3.818E-04	.0329	4.675E-04	.0403	5.261E-04	.0454	1.198E-03
BOT 2668(113)	31.81	30.80	3.751E-04	.0324	4.592E-04	.0396	5.169E-04	.0446	1.178E-03
TOP 5598(113)	31.84	30.82	3.749E-04	.0323	4.591E-04	.0396	5.167E-04	.0446	1.177E-03
OS 398(113)	31.84	30.82	3.749E-04	.0323	4.591E-04	.0396	5.167E-04	.0446	1.177E-03
NOS 7098(113)	31.84	30.82	3.749E-04	.0323	4.591E-04	.0396	5.167E-04	.0446	1.177E-03
TOP 5599(113)	32.91	31.90	3.685E-04	.0318	4.512E-04	.0389	5.079E-04	.0438	1.158E-03
OS 399(113)	32.91	31.90	3.685E-04	.0318	4.512E-04	.0389	5.079E-04	.0438	1.158E-03
BOT 2669(113)	32.91	31.90	3.685E-04	.0318	4.512E-04	.0389	5.079E-04	.0438	1.158E-03
NOS 7099(113)	32.94	31.93	3.684E-04	.0318	4.511E-04	.0389	5.077E-04	.0438	1.155E-03
TOP 5600(113)	34.01	33.00	3.623E-04	.0313	4.437E-04	.0383	4.993E-04	.0431	1.138E-03
OS 400(113)	34.01	33.00	3.623E-04	.0313	4.437E-04	.0383	4.993E-04	.0431	1.138E-03
BOT 2670(113)	34.01	33.00	3.623E-04	.0313	4.437E-04	.0383	4.993E-04	.0431	1.138E-03
NOS 7100(113)	34.01	33.00	3.623E-04	.0313	4.437E-04	.0383	4.993E-04	.0431	1.138E-03
OS 401(113)	35.12	34.10	3.564E-04	.0307	4.364E-04	.0376	4.912E-04	.0424	1.118E-03
BOT 2671(113)	35.12	34.10	3.564E-04	.0307	4.364E-04	.0376	4.912E-04	.0424	1.118E-03
NOS 7101(113)	35.12	34.10	3.564E-04	.0307	4.364E-04	.0376	4.912E-04	.0424	1.118E-03
TOP 5601(113)	35.14	34.13	3.563E-04	.0307	4.363E-04	.0376	4.910E-04	.0423	1.118E-03
TOP 5602(113)	36.22	35.20	3.508E-04	.0303	4.296E-04	.0370	4.835E-04	.0417	1.101E-03
OS 402(113)	36.22	35.20	3.508E-04	.0303	4.296E-04	.0370	4.835E-04	.0417	1.101E-03
BOT 2672(113)	36.22	35.20	3.508E-04	.0303	4.296E-04	.0370	4.835E-04	.0417	1.101E-03
NOS 7102(113)	36.22	35.20	3.508E-04	.0303	4.296E-04	.0370	4.835E-04	.0417	1.101E-03
TOP 5603(113)	37.29	36.28	3.456E-04	.0298	4.231E-04	.0365	4.762E-04	.0411	1.084E-03

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3/29/74

NASA-RI OH50

VAS26

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

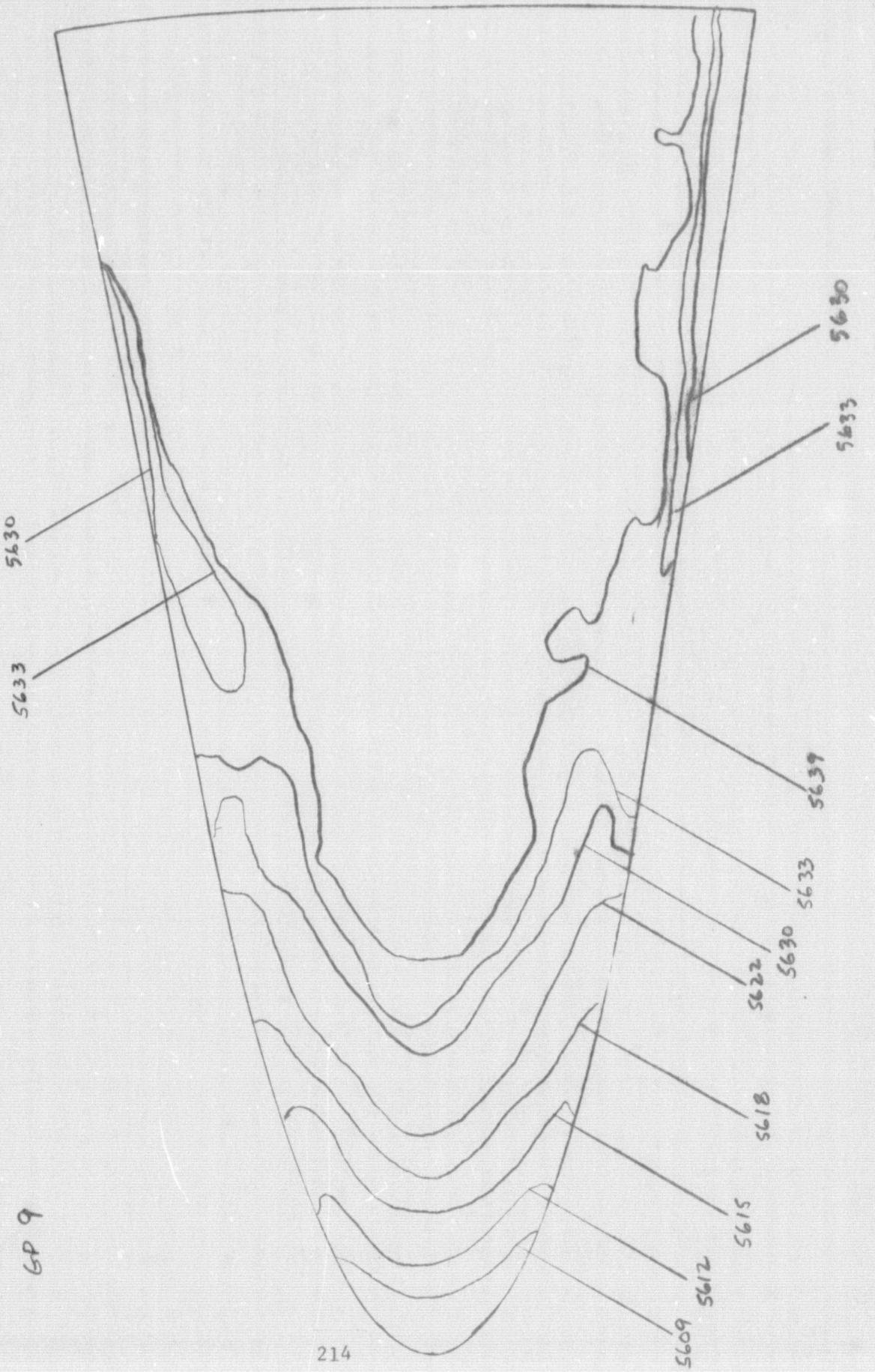
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
8	1	7.90	106.4	1248	29.98	0	30.00	2.00	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.6	.012	.517	3725	1.072E-05	7.455E-08	5.355E 05	1.160E-02	3.66RE-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7254	113	80	.0486	4.656E-02	4.2830E-02
UP SIDE(OS)	8410	113	80	.0486	4.656E-02	4.2830E-02
HOTTOM(BOT)	7514	113	80	.0486	4.656E-02	4.2830E-02
TOF(TOP)	7539	113	80	.0486	4.656E-02	4.2830E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
OS 403(113)	37.32	36.31	3.455E-04	.0298	4.230E-04	.0365	4.761E-04	.0411	1.084E-03
BOT 2673(113)	37.32	36.31	3.455E-04	.0298	4.230E-04	.0365	4.761E-04	.0411	1.084E-03
NOS 7103(113)	37.32	36.31	3.455E-04	.0298	4.230E-04	.0365	4.761E-04	.0411	1.084E-03
	37.72		MODEL HAS LEFT CENTERLINE						
OS 404(113)	38.39	37.38	3.404E-04	.0294	4.169E-04	.0360	4.692E-04	.0405	1.069E-03
BOT 2674(113)	38.39	37.38	3.404E-04	.0294	4.169E-04	.0360	4.692E-04	.0405	1.069E-03
TOP 5604(113)	38.42	37.41	3.403E-04	.0294	4.167E-04	.0359	4.690E-04	.0404	1.068E-03
NOS 7104(113)	38.42	37.41	3.403E-04	.0294	4.167E-04	.0359	4.690E-04	.0404	1.068E-03

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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
9	1	7.90	106.5	1245	25.02	4.98	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	PE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.4	.012	.517	3721	1.075E-05	7.438E-08	5.379E 05	1.160E-02	3.661E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7&54	150	81	.0505	0	0
UP SIDE(US)	8&10	150	81	.0505	0	0
BOTTOM(BOT)	7514	150	81	.0505	0	0
TOP(TOP)	7539	150	81	.0505	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	SI(TO)
TO 5605(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
US 405(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 2675(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7105(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 5606(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
US 406(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 2676(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7106(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 5607(150)	2.18	1.17	4.404E-03	.3798	5.448E-03	.4698	6.183E-03	.5332	1.377E-02
US 407(150)	2.18	1.17	4.404E-03	.3798	5.448E-03	.4698	6.183E-03	.5332	1.377E-02
NOT 2677(150)	2.18	1.17	4.404E-03	.3798	5.448E-03	.4698	6.183E-03	.5332	1.377E-02
NOS 7107(150)	2.18	1.17	4.404E-03	.3798	5.448E-03	.4698	6.183E-03	.5332	1.377E-02
TOP 5608(150)	3.28	2.27	3.158E-03	.2722	3.906E-03	.3367	4.434E-03	.3822	9.861E-03
US 408(150)	3.28	2.27	3.158E-03	.2722	3.906E-03	.3367	4.434E-03	.3822	9.861E-03
NOT 2678(150)	3.28	2.27	3.158E-03	.2722	3.906E-03	.3367	4.434E-03	.3822	9.861E-03
NOS 7108(150)	3.28	2.27	3.158E-03	.2722	3.906E-03	.3367	4.434E-03	.3822	9.861E-03
TOP 5609(150)	4.38	3.37	2.591E-03	.2232	3.205E-03	.2761	3.638E-03	.3134	8.082E-03
US 409(150)	4.38	3.37	2.591E-03	.2232	3.205E-03	.2761	3.638E-03	.3134	8.082E-03
NOT 2679(150)	4.38	3.37	2.591E-03	.2232	3.205E-03	.2761	3.638E-03	.3134	8.082E-03
NOS 7109(150)	4.38	3.37	2.591E-03	.2232	3.205E-03	.2761	3.638E-03	.3134	8.082E-03
NOT 2680(150)	5.46	4.44	2.255E-03	.1944	2.790E-03	.2405	3.167E-03	.2730	7.043E-03
TOP 5610(150)	5.48	4.47	2.249E-03	.1938	2.782E-03	.2397	3.158E-03	.2721	7.017E-03
US 410(150)	5.48	4.47	2.249E-03	.1938	2.782E-03	.2397	3.158E-03	.2721	7.017E-03
NOS 7110(150)	5.48	4.47	2.249E-03	.1938	2.782E-03	.2397	3.158E-03	.2721	7.017E-03
NOT 2681(150)	6.56	5.55	2.019E-03	.1740	2.498E-03	.2152	2.835E-03	.2443	6.299E-03
NOS 7111(150)	6.56	5.55	2.019E-03	.1740	2.498E-03	.2152	2.835E-03	.2443	6.299E-03

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3/29/74

NASA-RI 0H50

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
9	1	7.90	106.7	1245	25.02	4.98	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.4	.012	.518	3720	1.077E-05	7.437E-08	5.390E 05	1.161E-02	3.657E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.795E-02	9.4156E-02
UP SIDE(US)	8410	150	81	.0505	9.795E-02	9.4156E-02
BOTTOM(BOT)	7514	150	81	.0505	9.795E-02	9.4156E-02
TOP(TOP)	7539	150	81	.0505	9.795E-02	9.4156E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5611(150)	6.58	5.57	2.015E-03	.1735	2.492E-03	.2146	2.829E-03	.2436	6.279E-03
US 411(150)	6.58	5.57	2.015E-03	.1735	2.492E-03	.2146	2.829E-03	.2436	6.279E-03
TOP 5612(150)	7.66	6.65	1.844E-03	.1589	2.281E-03	.1965	2.590E-03	.2231	5.754E-03
US 412(150)	7.66	6.65	1.844E-03	.1589	2.281E-03	.1965	2.590E-03	.2231	5.754E-03
HOT 2682(150)	7.66	6.65	1.844E-03	.1589	2.281E-03	.1965	2.590E-03	.2231	5.754E-03
NOS 7112(150)	7.66	6.65	1.844E-03	.1589	2.281E-03	.1965	2.590E-03	.2231	5.754E-03
TOP 5613(150)	8.76	7.75	1.708E-03	.1472	2.113E-03	.1820	2.399E-03	.2066	5.329E-03
US 413(150)	8.76	7.75	1.708E-03	.1472	2.113E-03	.1820	2.399E-03	.2066	5.329E-03
HOT 2683(150)	8.76	7.75	1.708E-03	.1472	2.113E-03	.1820	2.399E-03	.2066	5.329E-03
NOS 7113(150)	8.76	7.75	1.708E-03	.1472	2.113E-03	.1820	2.399E-03	.2066	5.329E-03
TOP 5614(150)	9.86	8.85	1.598E-03	.1376	1.977E-03	.1703	2.244E-03	.1933	4.982E-03
US 414(150)	9.86	8.85	1.598E-03	.1376	1.977E-03	.1703	2.244E-03	.1933	4.982E-03
HOT 2684(150)	9.86	8.85	1.598E-03	.1376	1.977E-03	.1703	2.244E-03	.1933	4.982E-03
NOS 7114(150)	9.86	8.85	1.598E-03	.1376	1.977E-03	.1703	2.244E-03	.1933	4.982E-03
TOP 5615(150)	10.96	9.95	1.507E-03	.1297	1.865E-03	.1605	2.116E-03	.1822	4.694E-03
US 415(150)	10.96	9.95	1.507E-03	.1297	1.865E-03	.1605	2.116E-03	.1822	4.694E-03
HOT 2685(150)	10.96	9.95	1.507E-03	.1297	1.865E-03	.1605	2.116E-03	.1822	4.694E-03
NOS 7115(150)	10.96	9.95	1.507E-03	.1297	1.865E-03	.1605	2.116E-03	.1822	4.694E-03
TOP 5616(150)	12.06	11.05	1.430E-03	.1231	1.769E-03	.1523	2.008E-03	.1729	4.454E-03
US 416(150)	12.06	11.05	1.430E-03	.1231	1.769E-03	.1523	2.008E-03	.1729	4.454E-03
HOT 2686(150)	12.06	11.05	1.430E-03	.1231	1.769E-03	.1523	2.008E-03	.1729	4.454E-03
NOS 7116(150)	12.06	11.05	1.430E-03	.1231	1.769E-03	.1523	2.008E-03	.1729	4.454E-03
HOT 2687(150)	13.14	12.13	1.365E-03	.1175	1.689E-03	.1453	1.917E-03	.1649	4.247E-03
TOP 5617(150)	13.17	12.15	1.364E-03	.1173	1.687E-03	.1452	1.915E-03	.1648	4.243E-03
US 417(150)	13.17	12.15	1.364E-03	.1173	1.687E-03	.1452	1.915E-03	.1648	4.243E-03
NOS 7117(150)	13.17	12.15	1.364E-03	.1173	1.687E-03	.1452	1.915E-03	.1648	4.243E-03

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
9	1	7.90	107.0	1245	25.02	4.98	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.4	.012	.520	3720	1.080E-05	7.437E-08	5.405E 05	1.162E-02	3.652E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	THAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.795E-02	9.4156E-02
OP SIDE(OS)	8410	150	81	.0505	9.795E-02	9.4156E-02
HOTTOM(BOT)	7514	150	81	.0505	9.795E-02	9.4156E-02
TOP(TOP)	7539	150	81	.0505	9.795E-02	9.4156E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5618(150)	14.24	13.23	1.307E-03	.1125	1.617E-03	.1391	1.836E-03	.1579	4.067E-03
OS 418(150)	14.24	13.23	1.307E-03	.1125	1.617E-03	.1391	1.836E-03	.1579	4.067E-03
HOT 2688(150)	14.24	13.23	1.307E-03	.1125	1.617E-03	.1391	1.836E-03	.1579	4.067E-03
NOS 7118(150)	14.24	13.23	1.307E-03	.1125	1.617E-03	.1391	1.836E-03	.1579	4.067E-03
TOP 5619(150)	15.34	14.33	1.256E-03	.1080	1.554E-03	.1336	1.764E-03	.1517	3.904E-03
OS 419(150)	15.34	14.33	1.256E-03	.1080	1.554E-03	.1336	1.764E-03	.1517	3.904E-03
HOT 2689(150)	15.34	14.33	1.256E-03	.1080	1.554E-03	.1336	1.764E-03	.1517	3.904E-03
NOS 7119(150)	15.34	14.33	1.256E-03	.1080	1.554E-03	.1336	1.764E-03	.1517	3.904E-03
TOP 5620(150)	16.44	15.43	1.210E-03	.1041	1.497E-03	.1288	1.700E-03	.1461	3.762E-03
OS 420(150)	16.44	15.43	1.210E-03	.1041	1.497E-03	.1288	1.700E-03	.1461	3.762E-03
HOT 2690(150)	16.44	15.43	1.210E-03	.1041	1.497E-03	.1288	1.700E-03	.1461	3.762E-03
NOS 7120(150)	16.44	15.43	1.210E-03	.1041	1.497E-03	.1288	1.700E-03	.1461	3.762E-03
TOP 5621(150)	17.55	16.53	1.169E-03	.1006	1.447E-03	.1244	1.642E-03	.1412	3.635E-03
OS 421(150)	17.55	16.53	1.169E-03	.1006	1.447E-03	.1244	1.642E-03	.1412	3.635E-03
HOT 2691(150)	17.55	16.53	1.169E-03	.1006	1.447E-03	.1244	1.642E-03	.1412	3.635E-03
NOS 7121(150)	17.55	16.53	1.169E-03	.1006	1.447E-03	.1244	1.642E-03	.1412	3.635E-03
TOP 5622(150)	18.65	17.63	1.132E-03	.0973	1.401E-03	.1204	1.590E-03	.1367	3.516E-03
OS 422(150)	18.65	17.63	1.132E-03	.0973	1.401E-03	.1204	1.590E-03	.1367	3.516E-03
HOT 2692(150)	18.65	17.63	1.132E-03	.0973	1.401E-03	.1204	1.590E-03	.1367	3.516E-03
NOS 7122(150)	18.65	17.63	1.132E-03	.0973	1.401E-03	.1204	1.590E-03	.1367	3.516E-03
HOT 2693(150)	19.72	18.71	1.099E-03	.0944	1.360E-03	.1168	1.543E-03	.1326	3.410E-03
TOP 5623(150)	19.75	18.74	1.099E-03	.0944	1.359E-03	.1168	1.542E-03	.1326	3.411E-03
OS 423(150)	19.75	18.74	1.099E-03	.0944	1.359E-03	.1168	1.542E-03	.1326	3.411E-03
NOS 7123(150)	19.75	18.74	1.099E-03	.0944	1.359E-03	.1168	1.542E-03	.1326	3.411E-03
OS 424(150)	20.82	19.81	1.068E-03	.0918	1.321E-03	.1135	1.500E-03	.1289	3.314E-03
HOT 2694(150)	20.82	19.81	1.068E-03	.0918	1.321E-03	.1135	1.500E-03	.1289	3.314E-03
NOS 7124(150)	20.82	19.81	1.068E-03	.0918	1.321E-03	.1135	1.500E-03	.1289	3.314E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
9	1	7.90	107.3	1246	25.02	4.98	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.4	.012	.521	3721	1.083E-05	7.438E-08	5.419E 05	1.164E-02	3.647E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.795E-02	9.4156E-02
OP SIDE(OS)	8410	150	81	.0505	9.795E-02	9.4156E-02
BOTTOM(BOT)	7514	150	81	.0505	9.795E-02	9.4156E-02
TOP(TOP)	7539	150	81	.0505	9.795E-02	9.4156E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5624(150)	20.85	19.84	1.068E-03	.0917	1.321E-03	.1135	1.499E-03	.1288	3.312E-03
TOP 5625(150)	21.93	20.91	1.040E-03	.0893	1.286E-03	.1105	1.460E-03	.1254	3.226E-03
OS 425(150)	21.93	20.91	1.040E-03	.0893	1.286E-03	.1105	1.460E-03	.1254	3.226E-03
BOT 2695(150)	21.93	20.91	1.040E-03	.0893	1.286E-03	.1105	1.460E-03	.1254	3.226E-03
NOS 7125(150)	21.93	20.91	1.040E-03	.0893	1.286E-03	.1105	1.460E-03	.1254	3.226E-03
TOP 5626(150)	23.03	22.01	1.013E-03	.0871	1.254E-03	.1077	1.423E-03	.1222	3.144E-03
OS 426(150)	23.03	22.01	1.013E-03	.0871	1.254E-03	.1077	1.423E-03	.1222	3.144E-03
BOT 2696(150)	23.03	22.01	1.013E-03	.0871	1.254E-03	.1077	1.423E-03	.1222	3.144E-03
NOS 7126(150)	23.03	22.01	1.013E-03	.0871	1.254E-03	.1077	1.423E-03	.1222	3.144E-03
TOP 5627(150)	24.13	23.12	9.890E-04	.0850	1.223E-03	.1051	1.389E-03	.1193	3.068E-03
OS 427(150)	24.13	23.12	9.890E-04	.0850	1.223E-03	.1051	1.389E-03	.1193	3.068E-03
BOT 2697(150)	24.13	23.12	9.890E-04	.0850	1.223E-03	.1051	1.389E-03	.1193	3.068E-03
NOS 7127(150)	24.13	23.12	9.890E-04	.0850	1.223E-03	.1051	1.389E-03	.1193	3.068E-03
TOP 5628(150)	25.23	24.22	9.662E-04	.0830	1.195E-03	.1027	1.357E-03	.1166	2.997E-03
OS 428(150)	25.23	24.22	9.662E-04	.0830	1.195E-03	.1027	1.357E-03	.1166	2.997E-03
BOT 2698(150)	25.23	24.22	9.662E-04	.0830	1.195E-03	.1027	1.357E-03	.1166	2.997E-03
NOS 7128(150)	25.23	24.22	9.662E-04	.0830	1.195E-03	.1027	1.357E-03	.1166	2.997E-03
BOT 2699(150)	26.31	25.29	9.454E-04	.0811	1.170E-03	.1004	1.328E-03	.1139	2.928E-03
TOP 5629(150)	26.33	25.32	9.450E-04	.0812	1.169E-03	.1004	1.327E-03	.1140	2.932E-03
OS 429(150)	26.33	25.32	9.450E-04	.0812	1.169E-03	.1004	1.327E-03	.1140	2.932E-03
NOS 7129(150)	26.33	25.32	9.450E-04	.0812	1.169E-03	.1004	1.327E-03	.1140	2.932E-03
OS 430(150)	27.41	26.39	9.255E-04	.0794	1.145E-03	.0983	1.300E-03	.1115	2.866E-03
BOT 2700(150)	27.41	26.39	9.255E-04	.0794	1.145E-03	.0983	1.300E-03	.1115	2.866E-03
TOP 5630(150)	27.43	26.42	9.251E-04	.0794	1.144E-03	.0983	1.299E-03	.1115	2.867E-03
NOS 7130(150)	27.43	26.42	9.251E-04	.0794	1.144E-03	.0983	1.299E-03	.1115	2.867E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
9	1	7.90	107.4	1245	25.02	4.98	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.4	.012	.522	3721	1.094E-05	7.438E-08	5.425E 05	1.165E-02	3.645E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.795E-02	9.4156E-02
OP SIDE(OS)	8410	150	81	.0505	9.795E-02	9.4156E-02
BOTTOM(BOT)	7514	150	81	.0505	9.795E-02	9.4156E-02
TOP(TOP)	7539	150	81	.0505	9.795E-02	9.4156E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5631(150)	28.51	27.50	9.068E-04	.0778	1.122E-03	.0963	1.273E-03	.1093	2.808E-03
OS 431(150)	28.51	27.50	9.068E-04	.0778	1.122E-03	.0963	1.273E-03	.1093	2.808E-03
BOT 2701(150)	28.51	27.50	9.068E-04	.0778	1.122E-03	.0963	1.273E-03	.1093	2.808E-03
NOS 7131(150)	28.51	27.50	9.068E-04	.0778	1.122E-03	.0963	1.273E-03	.1093	2.808E-03
TOP 5632(150)	29.61	28.60	8.892E-04	.0763	1.100E-03	.0944	1.248E-03	.1072	2.753E-03
OS 432(150)	29.61	28.60	8.892E-04	.0763	1.100E-03	.0944	1.248E-03	.1072	2.753E-03
BOT 2702(150)	29.61	28.60	8.892E-04	.0763	1.100E-03	.0944	1.248E-03	.1072	2.753E-03
NOS 7132(150)	29.61	28.60	8.892E-04	.0763	1.100E-03	.0944	1.248E-03	.1072	2.753E-03
TOP 5633(150)	30.71	29.70	8.725E-04	.0749	1.079E-03	.0926	1.225E-03	.1052	2.702E-03
OS 433(150)	30.71	29.70	8.725E-04	.0749	1.079E-03	.0926	1.225E-03	.1052	2.702E-03
BOT 2703(150)	30.71	29.70	8.725E-04	.0749	1.079E-03	.0926	1.225E-03	.1052	2.702E-03
NOS 7133(150)	30.71	29.70	8.725E-04	.0749	1.079E-03	.0926	1.225E-03	.1052	2.702E-03
TOP 5634(150)	31.81	30.80	8.568E-04	.0735	1.060E-03	.0910	1.203E-03	.1033	2.653E-03
OS 434(150)	31.81	30.80	8.568E-04	.0735	1.060E-03	.0910	1.203E-03	.1033	2.653E-03
BOT 2704(150)	31.81	30.80	8.568E-04	.0735	1.060E-03	.0910	1.203E-03	.1033	2.653E-03
NOS 7134(150)	31.81	30.80	8.568E-04	.0735	1.060E-03	.0910	1.203E-03	.1033	2.653E-03
BOT 2705(150)	32.89	31.88	8.422E-04	.0722	1.042E-03	.0893	1.183E-03	.1014	2.603E-03
TOP 5635(150)	32.91	31.90	8.419E-04	.0722	1.041E-03	.0893	1.182E-03	.1014	2.604E-03
OS 435(150)	32.91	31.90	8.419E-04	.0722	1.041E-03	.0893	1.182E-03	.1014	2.604E-03
NOS 7135(150)	32.91	31.90	8.419E-04	.0722	1.041E-03	.0893	1.182E-03	.1014	2.604E-03
OS 436(150)	33.99	32.98	8.280E-04	.0710	1.024E-03	.0878	1.163E-03	.0997	2.559E-03
BOT 2706(150)	33.99	32.98	8.280E-04	.0710	1.024E-03	.0878	1.163E-03	.0997	2.559E-03
NOS 7136(150)	33.99	32.98	8.280E-04	.0710	1.024E-03	.0878	1.163E-03	.0997	2.559E-03
TOP 5636(150)	34.01	33.00	8.277E-04	.0710	1.024E-03	.0879	1.162E-03	.0998	2.563E-03
OS 437(150)	35.09	34.08	8.145E-04	.0698	1.008E-03	.0864	1.144E-03	.0981	2.517E-03
BOT 2707(150)	35.09	34.08	8.145E-04	.0698	1.008E-03	.0864	1.144E-03	.0981	2.517E-03
NOS 7137(150)	35.09	34.08	8.145E-04	.0698	1.008E-03	.0864	1.144E-03	.0981	2.517E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

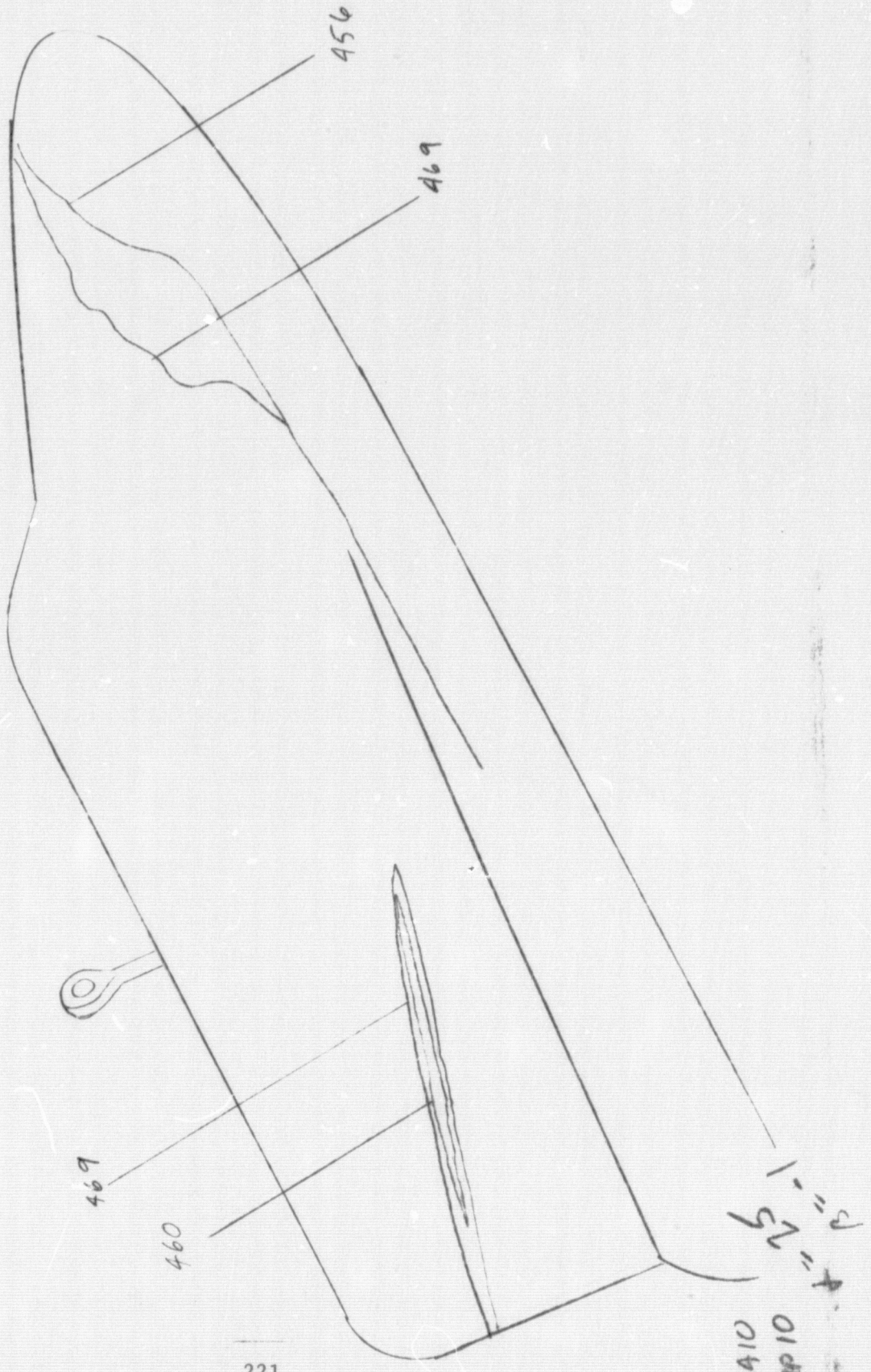
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
9	1	7.90	107.7	1246	25.02	4.98	30.00	0	0

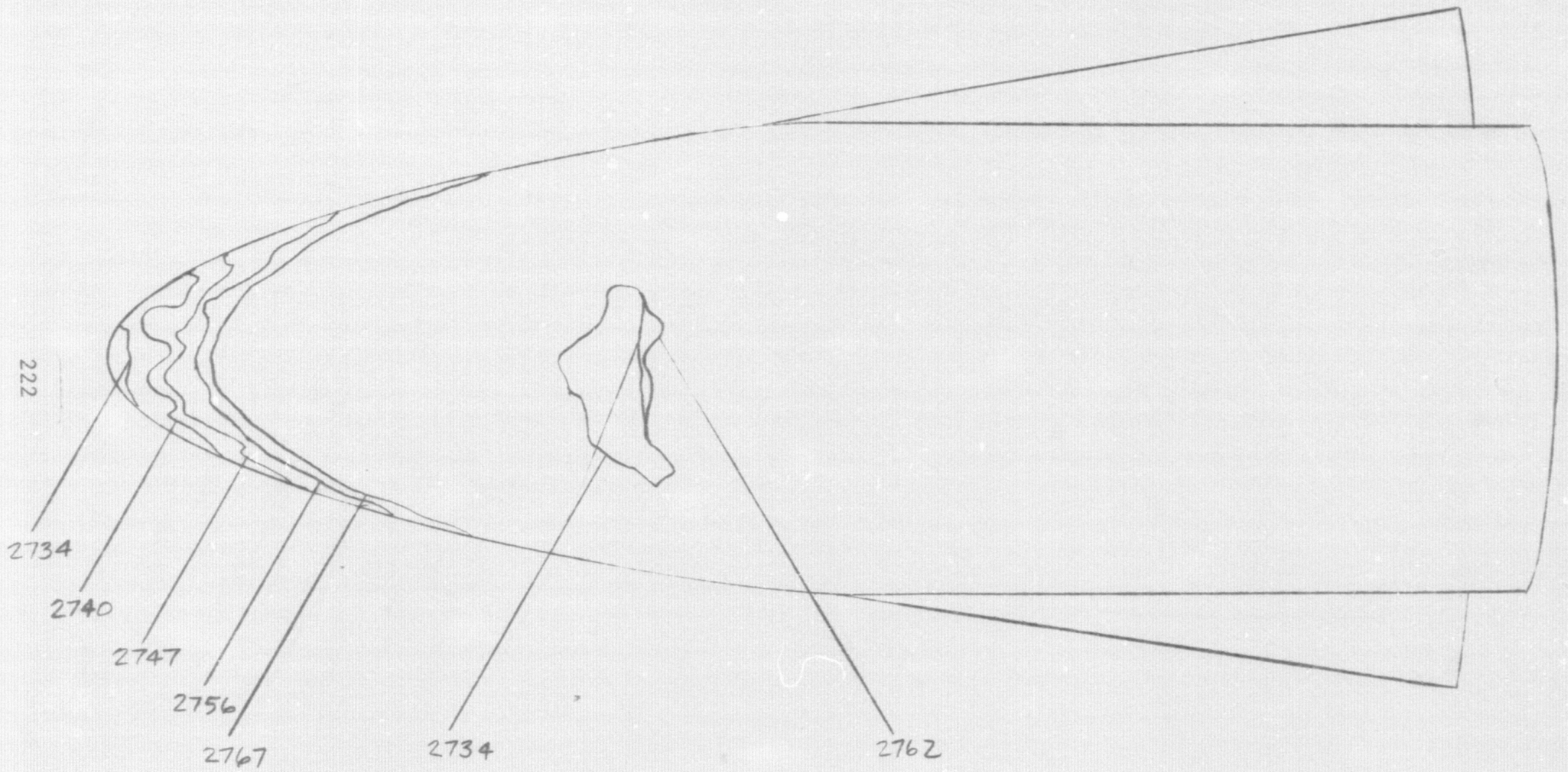
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.4	.012	.523	3721	1.087E-05	7.438E-08	5.439E 05	1.166E-02	3.640E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.795E-02	9.4156E-02
OP SIDE(OS)	8410	150	81	.0505	9.795E-02	9.4156E-02
BOTTOM(BOT)	7514	150	81	.0505	9.795E-02	9.4156E-02
TOP(TOP)	7539	150	81	.0505	9.795E-02	9.4156E-02

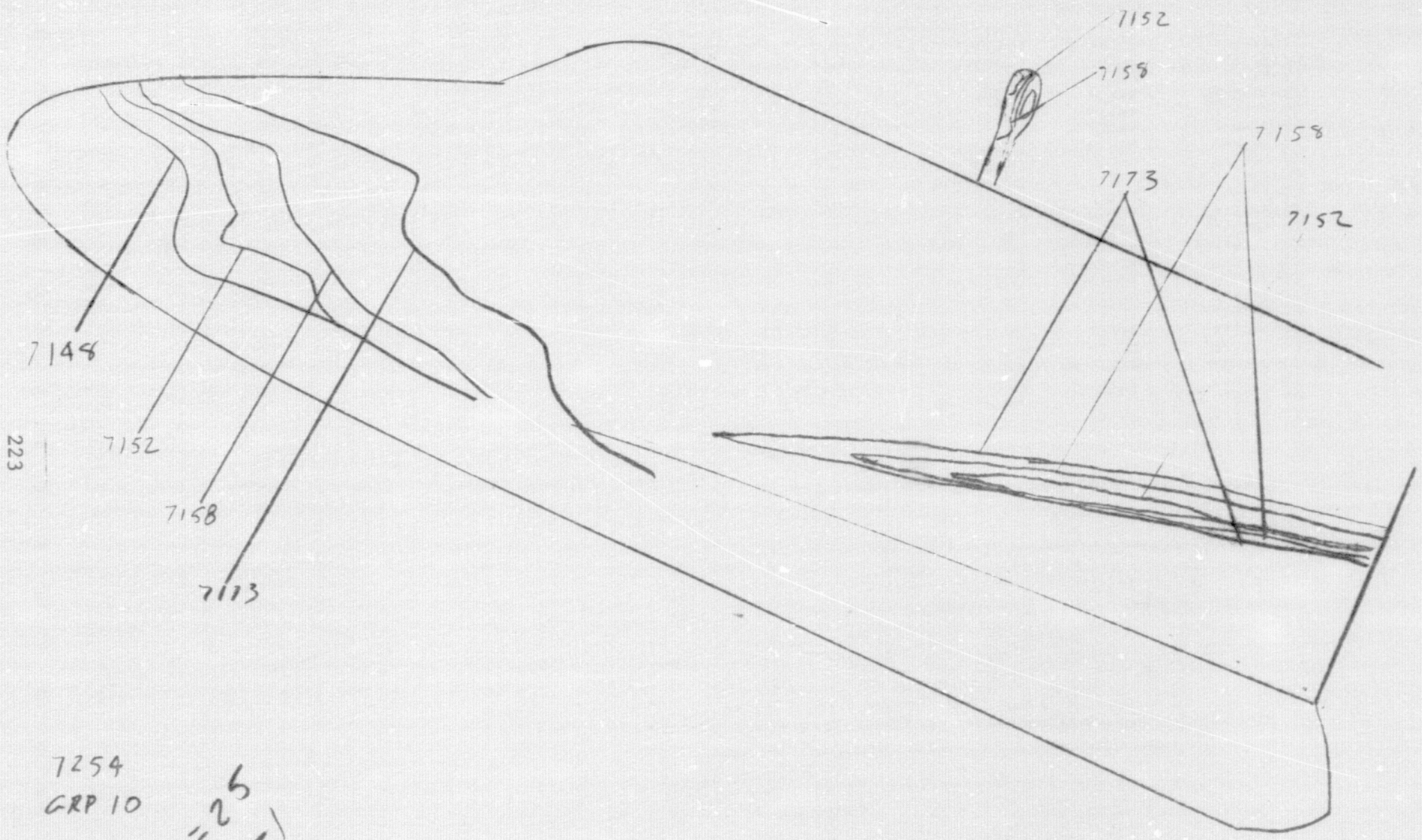
PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5637(150)	35.12	34.10	8.142E-04	.0699	1.007E-03	.0864	1.143E-03	.0981	2.521E-03
TOP 5638(150)	36.19	35.18	8.017E-04	.0687	9.917E-04	.0850	1.126E-03	.0965	2.478E-03
OS 438(150)	36.19	35.18	8.017E-04	.0687	9.917E-04	.0850	1.126E-03	.0965	2.478E-03
BOT 2708(150)	36.19	35.18	8.017E-04	.0687	9.917E-04	.0850	1.126E-03	.0965	2.478E-03
NOS 7138(150)	36.19	35.18	8.017E-04	.0687	9.917E-04	.0850	1.126E-03	.0965	2.478E-03
TOP 5639(150)	37.29	36.28	7.894E-04	.0677	9.765E-04	.0838	1.108E-03	.0951	2.442E-03
OS 439(150)	37.29	36.28	7.894E-04	.0677	9.765E-04	.0838	1.108E-03	.0951	2.442E-03
BOT 2709(150)	37.29	36.28	7.894E-04	.0677	9.765E-04	.0838	1.108E-03	.0951	2.442E-03
NOS 7139(150)	37.29	36.28	7.894E-04	.0677	9.765E-04	.0838	1.108E-03	.0951	2.442E-03
	38.34		MODEL HAS LEFT CENTERLINE						
TOP 5640(150)	38.39	37.38	7.777E-04	.0667	9.620E-04	.0825	1.092E-03	.0936	2.404E-03
OS 440(150)	38.39	37.38	7.777E-04	.0667	9.620E-04	.0825	1.092E-03	.0936	2.404E-03
BOT 2710(150)	38.39	37.38	7.777E-04	.0667	9.620E-04	.0825	1.092E-03	.0936	2.404E-03
NOS 7140(150)	38.39	37.38	7.777E-04	.0667	9.620E-04	.0825	1.092E-03	.0936	2.404E-03
TOP 5641(150)	39.50	38.48	7.665E-04	.0657	9.481E-04	.0813	1.076E-03	.0923	2.369E-03
OS 441(150)	39.50	38.48	7.665E-04	.0657	9.481E-04	.0813	1.076E-03	.0923	2.369E-03
BOT 2711(150)	39.50	38.48	7.665E-04	.0657	9.481E-04	.0813	1.076E-03	.0923	2.369E-03
NOS 7141(150)	39.50	38.48	7.665E-04	.0657	9.481E-04	.0813	1.076E-03	.0923	2.369E-03

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR





7898



7254
GRP 10

3/29/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREREND	ROLL-MODEL	YAW
10	1	7.90	108.3	1244	24.98	5.01	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
92.3	.012	.526	3719	1.095E-05	7.430E-08	5.479E 05	1.169E-02	3.628E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7254	113	79	.0486	0	0
OP SIDE(OS)	8410	113	79	.0486	0	0
BOTTOM(BOT)	7698	113	79	.0486	0	0
TOP(TOP)	7539	113	79	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
HO 2732(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 2733(113)	1.05		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 5642(113)	2.10	1.09	2.068E-03	.1767	2.531E-03	.2164	2.850E-03	.2437	6.359E-03
OS 442(113)	2.10	1.09	2.068E-03	.1767	2.531E-03	.2164	2.850E-03	.2437	6.359E-03
HOT 2734(113)	2.10	1.09	2.068E-03	.1767	2.531E-03	.2164	2.850E-03	.2437	6.359E-03
HOT 2735(113)	3.15	2.14	1.475E-03	.1261	1.806E-03	.1544	2.034E-03	.1739	4.538E-03
TOP 5643(113)	3.18	2.17	1.467E-03	.1255	1.796E-03	.1536	2.022E-03	.1730	4.520E-03
OS 443(113)	3.18	2.17	1.467E-03	.1255	1.796E-03	.1536	2.022E-03	.1730	4.520E-03
NOS 7142(113)	3.18	2.17	1.467E-03	.1255	1.796E-03	.1536	2.022E-03	.1730	4.520E-03
TOP 5644(113)	4.25	3.24	1.199E-03	.1025	1.468E-03	.1255	1.653E-03	.1414	3.691E-03
OS 444(113)	4.25	3.24	1.199E-03	.1025	1.468E-03	.1255	1.653E-03	.1414	3.691E-03
HOT 2736(113)	4.25	3.24	1.199E-03	.1025	1.468E-03	.1255	1.653E-03	.1414	3.691E-03
NOS 7143(113)	4.25	3.24	1.199E-03	.1025	1.468E-03	.1255	1.653E-03	.1414	3.691E-03
TOP 5645(113)	5.33	4.32	1.039E-03	.0889	1.272E-03	.1088	1.432E-03	.1226	3.201E-03
OS 445(113)	5.33	4.32	1.039E-03	.0889	1.272E-03	.1088	1.432E-03	.1226	3.201E-03
HOT 2737(113)	5.36	4.34	1.036E-03	.0886	1.268E-03	.1085	1.428E-03	.1221	3.189E-03
NOS 7144(113)	5.36	4.34	1.036E-03	.0886	1.268E-03	.1085	1.428E-03	.1221	3.189E-03
TOP 5646(113)	6.43	5.42	9.275E-04	.0794	1.135E-03	.0971	1.279E-03	.1094	2.858E-03
OS 446(113)	6.43	5.42	9.275E-04	.0794	1.135E-03	.0971	1.279E-03	.1094	2.858E-03
HOT 2738(113)	6.43	5.42	9.275E-04	.0794	1.135E-03	.0971	1.279E-03	.1094	2.858E-03
NOS 7145(113)	6.43	5.42	9.275E-04	.0794	1.135E-03	.0971	1.279E-03	.1094	2.858E-03
TOP 5647(113)	7.53	6.52	8.456E-04	.0724	1.035E-03	.0886	1.166E-03	.0998	2.608E-03
OS 447(113)	7.53	6.52	8.456E-04	.0724	1.035E-03	.0886	1.166E-03	.0998	2.608E-03
HOT 2739(113)	7.53	6.52	8.456E-04	.0724	1.035E-03	.0886	1.166E-03	.0998	2.608E-03
NOS 7146(113)	7.53	6.52	8.456E-04	.0724	1.035E-03	.0886	1.166E-03	.0998	2.608E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

NASA-RI OH50

VAS26

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
10	1	7.90	108.1	1244	24.98	5.01	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.3	.012	.525	3719	1.093E-05	7.430E-08	5.469E 05	1.168E-02	3.631E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCKK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7254	113	79	.0486	4.820E-02	4.4432E-02
OP SIDE(OS)	8410	113	79	.0486	4.820E-02	4.4432E-02
HOTTOM(BOT)	7698	113	79	.0486	4.820E-02	4.4432E-02
TOP(TOP)	7539	113	79	.0486	4.820E-02	4.4432E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
HOT 2740(113)	8.61	7.60	7.834E-04	.0671	9.589E-04	.0821	1.080E-03	.0925	2.418E-03
TOP 5648(113)	8.63	7.62	7.821E-04	.0670	9.573E-04	.0820	1.078E-03	.0923	2.412E-03
OS 448(113)	8.63	7.62	7.821E-04	.0670	9.573E-04	.0820	1.078E-03	.0923	2.412E-03
NOS 7147(113)	8.63	7.62	7.821E-04	.0670	9.573E-04	.0820	1.078E-03	.0923	2.412E-03
TOP 5649(113)	9.71	8.70	7.321E-04	.0627	8.962E-04	.0768	1.009E-03	.0864	2.260E-03
OS 449(113)	9.71	8.70	7.321E-04	.0627	8.962E-04	.0768	1.009E-03	.0864	2.260E-03
HOT 2741(113)	9.71	8.70	7.321E-04	.0627	8.962E-04	.0768	1.009E-03	.0864	2.260E-03
NOS 7148(113)	9.71	8.70	7.321E-04	.0627	8.962E-04	.0768	1.009E-03	.0864	2.260E-03
TOP 5650(113)	10.81	9.80	6.898E-04	.0591	8.443E-04	.0723	9.509E-04	.0815	2.131E-03
OS 450(113)	10.81	9.80	6.898E-04	.0591	8.443E-04	.0723	9.509E-04	.0815	2.131E-03
HOT 2742(113)	10.81	9.80	6.898E-04	.0591	8.443E-04	.0723	9.509E-04	.0815	2.131E-03
NOS 7149(113)	10.81	9.80	6.898E-04	.0591	8.443E-04	.0723	9.509E-04	.0815	2.131E-03
OS 451(113)	11.89	10.88	6.547E-04	.0561	8.015E-04	.0687	9.027E-04	.0773	2.023E-03
HOT 2743(113)	11.89	10.88	6.547E-04	.0561	8.015E-04	.0687	9.027E-04	.0773	2.023E-03
NOS 7150(113)	11.89	10.88	6.547E-04	.0561	8.015E-04	.0687	9.027E-04	.0773	2.023E-03
TOP 5651(113)	11.91	10.90	6.540E-04	.0560	8.005E-04	.0686	9.016E-04	.0773	2.021E-03
TOP 5652(113)	12.99	11.98	6.239E-04	.0535	7.637E-04	.0654	8.602E-04	.0737	1.928E-03
OS 452(113)	12.99	11.98	6.239E-04	.0535	7.637E-04	.0654	8.602E-04	.0737	1.928E-03
HOT 2744(113)	12.99	11.98	6.239E-04	.0535	7.637E-04	.0654	8.602E-04	.0737	1.928E-03
NOS 7151(113)	12.99	11.98	6.239E-04	.0535	7.637E-04	.0654	8.602E-04	.0737	1.928E-03
TOP 5653(113)	14.09	13.08	5.971E-04	.0512	7.309E-04	.0627	8.231E-04	.0706	1.846E-03
OS 453(113)	14.09	13.08	5.971E-04	.0512	7.309E-04	.0627	8.231E-04	.0706	1.846E-03
HOT 2745(113)	14.09	13.08	5.971E-04	.0512	7.309E-04	.0627	8.231E-04	.0706	1.846E-03
NOS 7152(113)	14.09	13.08	5.971E-04	.0512	7.309E-04	.0627	8.231E-04	.0706	1.846E-03
HOT 2746(113)	15.17	14.16	5.739E-04	.0492	7.025E-04	.0602	7.912E-04	.0678	1.773E-03

3/29/74

NASA-RI OH50

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
10	1	7.90	107.9	1244	24.98	5.01	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	PF/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.3	.012	.524	3718	1.091E-05	7.428E-08	5.460E 05	1.167E-02	3.634E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	79	.0486	4.820E-02	4.4432E-02
UP SIDE(OS)	8410	113	79	.0486	4.820E-02	4.4432E-02
HOTTOM(BOT)	7698	113	79	.0486	4.820E-02	4.4432E-02
TOP(TOP)	7539	113	79	.0486	4.820E-02	4.4432E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5654(113)	15.19	14.18	5.734E-04	.0492	7.019E-04	.0602	7.905E-04	.0678	1.773E-03
OS 454(113)	15.19	14.18	5.734E-04	.0492	7.019E-04	.0602	7.905E-04	.0678	1.773E-03
NOS 7153(113)	15.19	14.18	5.734E-04	.0492	7.019E-04	.0602	7.905E-04	.0678	1.773E-03
TOP 5655(113)	16.27	15.26	5.528E-04	.0474	6.767E-04	.0580	7.621E-04	.0653	1.708E-03
OS 455(113)	16.27	15.26	5.528E-04	.0474	6.767E-04	.0580	7.621E-04	.0653	1.708E-03
HOT 2747(113)	16.27	15.26	5.528E-04	.0474	6.767E-04	.0580	7.621E-04	.0653	1.708E-03
NOS 7154(113)	16.27	15.26	5.528E-04	.0474	6.767E-04	.0580	7.621E-04	.0653	1.708E-03
TOP 5656(113)	17.37	16.36	5.339E-04	.0458	6.535E-04	.0560	7.360E-04	.0631	1.651E-03
OS 456(113)	17.37	16.36	5.339E-04	.0458	6.535E-04	.0560	7.360E-04	.0631	1.651E-03
HOT 2748(113)	17.37	16.36	5.339E-04	.0458	6.535E-04	.0560	7.360E-04	.0631	1.651E-03
NOS 7155(113)	17.37	16.36	5.339E-04	.0458	6.535E-04	.0560	7.360E-04	.0631	1.651E-03
OS 457(113)	18.45	17.43	5.172E-04	.0444	6.330E-04	.0543	7.130E-04	.0612	1.601E-03
HOT 2749(113)	18.45	17.43	5.172E-04	.0444	6.330E-04	.0543	7.130E-04	.0612	1.601E-03
TOP 5657(113)	18.47	17.46	5.168E-04	.0443	6.326E-04	.0543	7.125E-04	.0611	1.600E-03
NOS 7156(113)	18.47	17.46	5.168E-04	.0443	6.326E-04	.0543	7.125E-04	.0611	1.600E-03
TOP 5658(113)	19.55	18.54	5.016E-04	.0430	6.140E-04	.0527	6.915E-04	.0593	1.554E-03
OS 458(113)	19.55	18.54	5.016E-04	.0430	6.140E-04	.0527	6.915E-04	.0593	1.554E-03
HOT 2750(113)	19.55	18.54	5.016E-04	.0430	6.140E-04	.0527	6.915E-04	.0593	1.554E-03
NOS 7157(113)	19.55	18.54	5.016E-04	.0430	6.140E-04	.0527	6.915E-04	.0593	1.554E-03
TOP 5659(113)	20.65	19.64	4.873E-04	.0418	5.965E-04	.0512	6.718E-04	.0576	1.508E-03
OS 459(113)	20.65	19.64	4.873E-04	.0418	5.965E-04	.0512	6.718E-04	.0576	1.508E-03
HOT 2751(113)	20.65	19.64	4.873E-04	.0418	5.965E-04	.0512	6.718E-04	.0576	1.508E-03
NOS 7158(113)	20.65	19.64	4.873E-04	.0418	5.965E-04	.0512	6.718E-04	.0576	1.508E-03
HOT 2752(113)	21.72	20.71	4.745E-04	.0407	5.808E-04	.0498	6.541E-04	.0561	1.470E-03
TOP 5660(113)	21.75	20.74	4.742E-04	.0407	5.804E-04	.0498	6.537E-04	.0561	1.468E-03
OS 460(113)	21.75	20.74	4.742E-04	.0407	5.804E-04	.0498	6.537E-04	.0561	1.468E-03
NOS 7159(113)	21.75	20.74	4.742E-04	.0407	5.804E-04	.0498	6.537E-04	.0561	1.468E-03

3/29/74

NASA-RI 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA52E

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
10	1	7.90	107.7	1244	24.98	5.01	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.3	.016	.523	3718	1.085E-05	7.428E-08	5.450E 05	1.166E-02	3.637E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	79	.0486	4.820E-02	4.4432E-02
OP SIDE(OS)	8410	113	79	.0486	4.820E-02	4.4432E-02
HOTTOM(BOT)	7698	113	79	.0486	4.820E-02	4.4432E-02
TOP(TOP)	7539	113	79	.0486	4.820E-02	4.4432E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5661(113)	22.83	21.81	4.623E-04	.0397	5.659E-04	.0487	6.374E-04	.0548	1.438E-03
OS 461(113)	22.83	21.81	4.623E-04	.0397	5.659E-04	.0487	6.374E-04	.0548	1.438E-03
HOT 2753(113)	22.83	21.81	4.623E-04	.0397	5.659E-04	.0487	6.374E-04	.0548	1.438E-03
NOS 7160(113)	22.83	21.81	4.623E-04	.0397	5.659E-04	.0487	6.374E-04	.0548	1.438E-03
TOP 5662(113)	23.93	22.92	4.611E-04	.0387	5.522E-04	.0474	6.219E-04	.0534	1.399E-03
OS 462(113)	23.93	22.92	4.611E-04	.0387	5.522E-04	.0474	6.219E-04	.0534	1.399E-03
HOT 2754(113)	23.93	22.92	4.611E-04	.0387	5.522E-04	.0474	6.219E-04	.0534	1.399E-03
NOS 7161(113)	23.93	22.92	4.611E-04	.0387	5.522E-04	.0474	6.219E-04	.0534	1.399E-03
TOP 5663(113)	25.03	24.02	4.406E-04	.0378	5.394E-04	.0463	6.075E-04	.0521	1.366E-03
OS 463(113)	25.03	24.02	4.406E-04	.0378	5.394E-04	.0463	6.075E-04	.0521	1.366E-03
HOT 2755(113)	25.03	24.02	4.406E-04	.0378	5.394E-04	.0463	6.075E-04	.0521	1.366E-03
NOS 7162(113)	25.03	24.02	4.406E-04	.0378	5.394E-04	.0463	6.075E-04	.0521	1.366E-03
TOP 5664(113)	26.11	25.09	4.311E-04	.0370	5.277E-04	.0453	5.943E-04	.0510	1.337E-03
OS 464(113)	26.11	25.09	4.311E-04	.0370	5.277E-04	.0453	5.943E-04	.0510	1.337E-03
HOT 2756(113)	26.11	25.09	4.311E-04	.0370	5.277E-04	.0453	5.943E-04	.0510	1.337E-03
NOS 7163(113)	26.11	25.09	4.311E-04	.0370	5.277E-04	.0453	5.943E-04	.0510	1.337E-03
TOP 5665(113)	27.21	26.19	4.219E-04	.0362	5.165E-04	.0443	5.817E-04	.0499	1.308E-03
OS 465(113)	27.21	26.19	4.219E-04	.0362	5.165E-04	.0443	5.817E-04	.0499	1.308E-03
HOT 2757(113)	27.21	26.19	4.219E-04	.0362	5.165E-04	.0443	5.817E-04	.0499	1.308E-03
NOS 7164(113)	27.21	26.19	4.219E-04	.0362	5.165E-04	.0443	5.817E-04	.0499	1.308E-03
HOT 2758(113)	28.28	27.27	4.135E-04	.0355	5.062E-04	.0435	5.701E-04	.0489	1.282E-03
TOP 5666(113)	28.31	27.30	4.133E-04	.0355	5.059E-04	.0435	5.698E-04	.0489	1.283E-03
OS 466(113)	28.31	27.30	4.133E-04	.0355	5.059E-04	.0435	5.698E-04	.0489	1.283E-03
NOS 7165(113)	28.31	27.30	4.133E-04	.0355	5.059E-04	.0435	5.698E-04	.0489	1.283E-03
TOP 5667(113)	29.38	28.37	4.054E-04	.0348	4.962E-04	.0426	5.589E-04	.0480	1.257E-03
OS 467(113)	29.38	28.37	4.054E-04	.0348	4.962E-04	.0426	5.589E-04	.0480	1.257E-03
HOT 2759(113)	29.38	28.37	4.054E-04	.0348	4.962E-04	.0426	5.589E-04	.0480	1.257E-03
NOS 7166(113)	29.38	28.37	4.054E-04	.0348	4.962E-04	.0426	5.589E-04	.0480	1.257E-03

3/29/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
10	1	7.90	107.5	1244	24.98	5.01	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
92.3	.012	.522	3718	1.087E-05	7.428E-08	5.440E 05	1.165E-02	3.641E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7264	113	79	.0486	4.820E-02	4.4432E-02
UP SIDE(US)	8410	113	79	.0486	4.820E-02	4.4432E-02
HOTTOM(BOT)	7698	113	79	.0486	4.820E-02	4.4432E-02
TOP(TOP)	7539	113	79	.0486	4.820E-02	4.4432E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5668(113)	30.49	29.47	3.978E-04	.0341	4.869E-04	.0418	5.484E-04	.0471	1.233E-03
US 468(113)	30.49	29.47	3.978E-04	.0341	4.869E-04	.0418	5.484E-04	.0471	1.233E-03
HOT 2760(113)	30.49	29.47	3.978E-04	.0341	4.869E-04	.0418	5.484E-04	.0471	1.233E-03
NOS 7167(113)	30.49	29.47	3.978E-04	.0341	4.869E-04	.0418	5.484E-04	.0471	1.233E-03
TOP 5669(113)	31.59	30.57	3.905E-04	.0335	4.780E-04	.0411	5.384E-04	.0462	1.212E-03
US 469(113)	31.59	30.57	3.905E-04	.0335	4.780E-04	.0411	5.384E-04	.0462	1.212E-03
HOT 2761(113)	31.59	30.57	3.905E-04	.0335	4.780E-04	.0411	5.384E-04	.0462	1.212E-03
NOS 7168(113)	31.59	30.57	3.905E-04	.0335	4.780E-04	.0411	5.384E-04	.0462	1.212E-03
TOP 5670(113)	32.66	31.65	3.838E-04	.0330	4.698E-04	.0404	5.292E-04	.0454	1.191E-03
US 470(113)	32.66	31.65	3.838E-04	.0330	4.698E-04	.0404	5.292E-04	.0454	1.191E-03
HOT 2762(113)	32.66	31.65	3.838E-04	.0330	4.698E-04	.0404	5.292E-04	.0454	1.191E-03
NOS 7169(113)	32.66	31.65	3.838E-04	.0330	4.698E-04	.0404	5.292E-04	.0454	1.191E-03
TOP 5671(113)	33.76	32.75	3.773E-04	.0324	4.619E-04	.0397	5.202E-04	.0447	1.172E-03
US 471(113)	33.76	32.75	3.773E-04	.0324	4.619E-04	.0397	5.202E-04	.0447	1.172E-03
HOT 2763(113)	33.76	32.75	3.773E-04	.0324	4.619E-04	.0397	5.202E-04	.0447	1.172E-03
NOS 7170(113)	33.76	32.75	3.773E-04	.0324	4.619E-04	.0397	5.202E-04	.0447	1.172E-03
HOT 2764(113)	34.84	33.83	3.713E-04	.0319	4.545E-04	.0391	5.118E-04	.0440	1.153E-03
TOP 5672(113)	34.87	33.85	3.711E-04	.0319	4.543E-04	.0390	5.117E-04	.0439	1.152E-03
US 472(113)	34.87	33.85	3.711E-04	.0319	4.543E-04	.0390	5.117E-04	.0439	1.152E-03
NOS 7171(113)	34.87	33.85	3.711E-04	.0319	4.543E-04	.0390	5.117E-04	.0439	1.152E-03
TOP 5673(113)	35.94	34.93	3.654E-04	.0314	4.472E-04	.0384	5.037E-04	.0433	1.135E-03
US 473(113)	35.94	34.93	3.654E-04	.0314	4.472E-04	.0384	5.037E-04	.0433	1.135E-03
HOT 2765(113)	35.94	34.93	3.654E-04	.0314	4.472E-04	.0384	5.037E-04	.0433	1.135E-03
NOS 7172(113)	35.94	34.93	3.654E-04	.0314	4.472E-04	.0384	5.037E-04	.0433	1.135E-03
TOP 5674(113)	37.04	36.03	3.597E-04	.0309	4.404E-04	.0379	4.959E-04	.0426	1.119E-03
US 474(113)	37.04	36.03	3.597E-04	.0309	4.404E-04	.0379	4.959E-04	.0426	1.119E-03
HOT 2766(113)	37.04	36.03	3.597E-04	.0309	4.404E-04	.0379	4.959E-04	.0426	1.119E-03
NOS 7173(113)	37.04	36.03	3.597E-04	.0309	4.404E-04	.0379	4.959E-04	.0426	1.119E-03

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3/29/74

NASA-RI 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA526

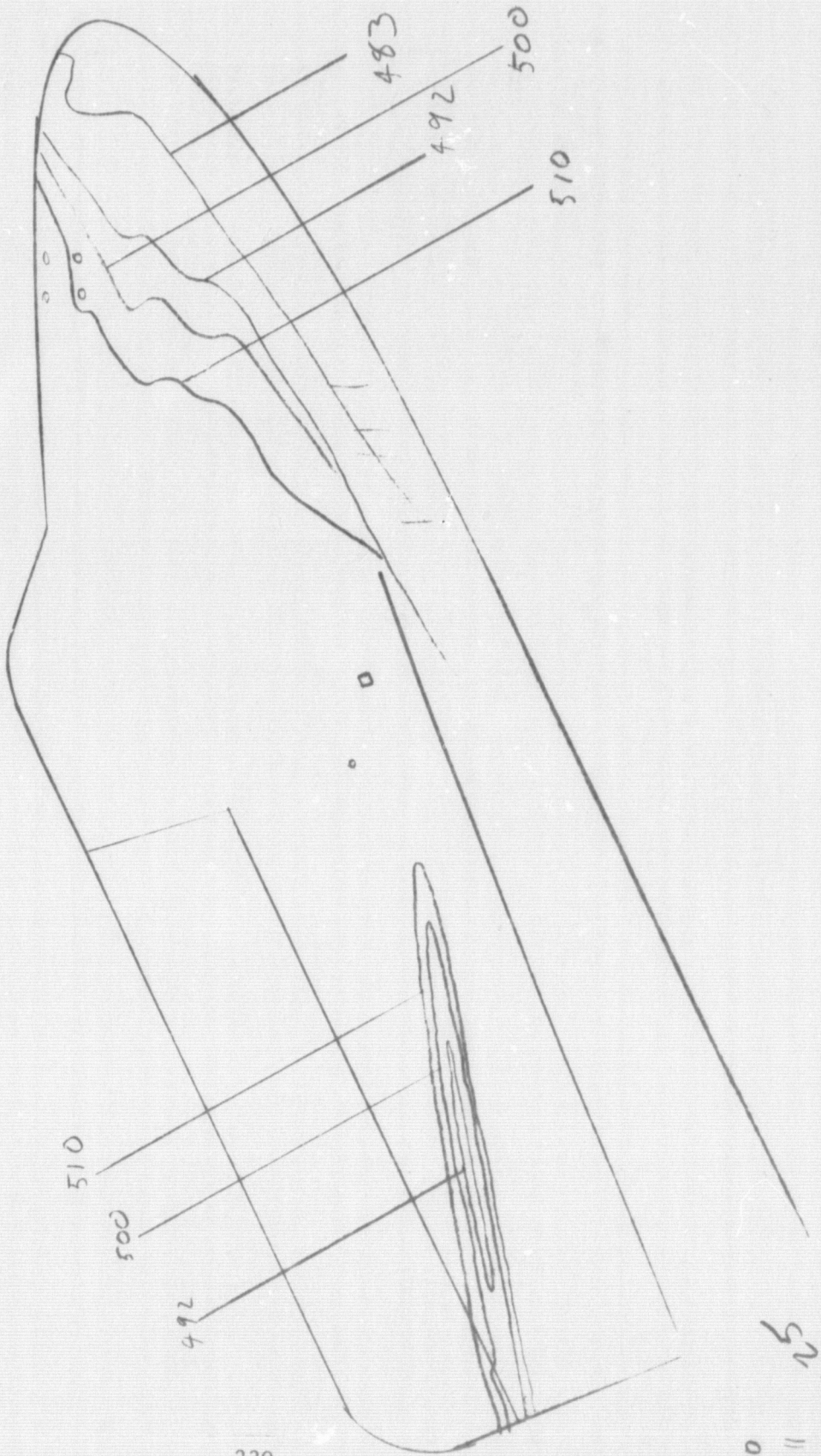
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
10	1	7.90	107.2	1244	24.98	5.01	30.00	-2.37	1.00

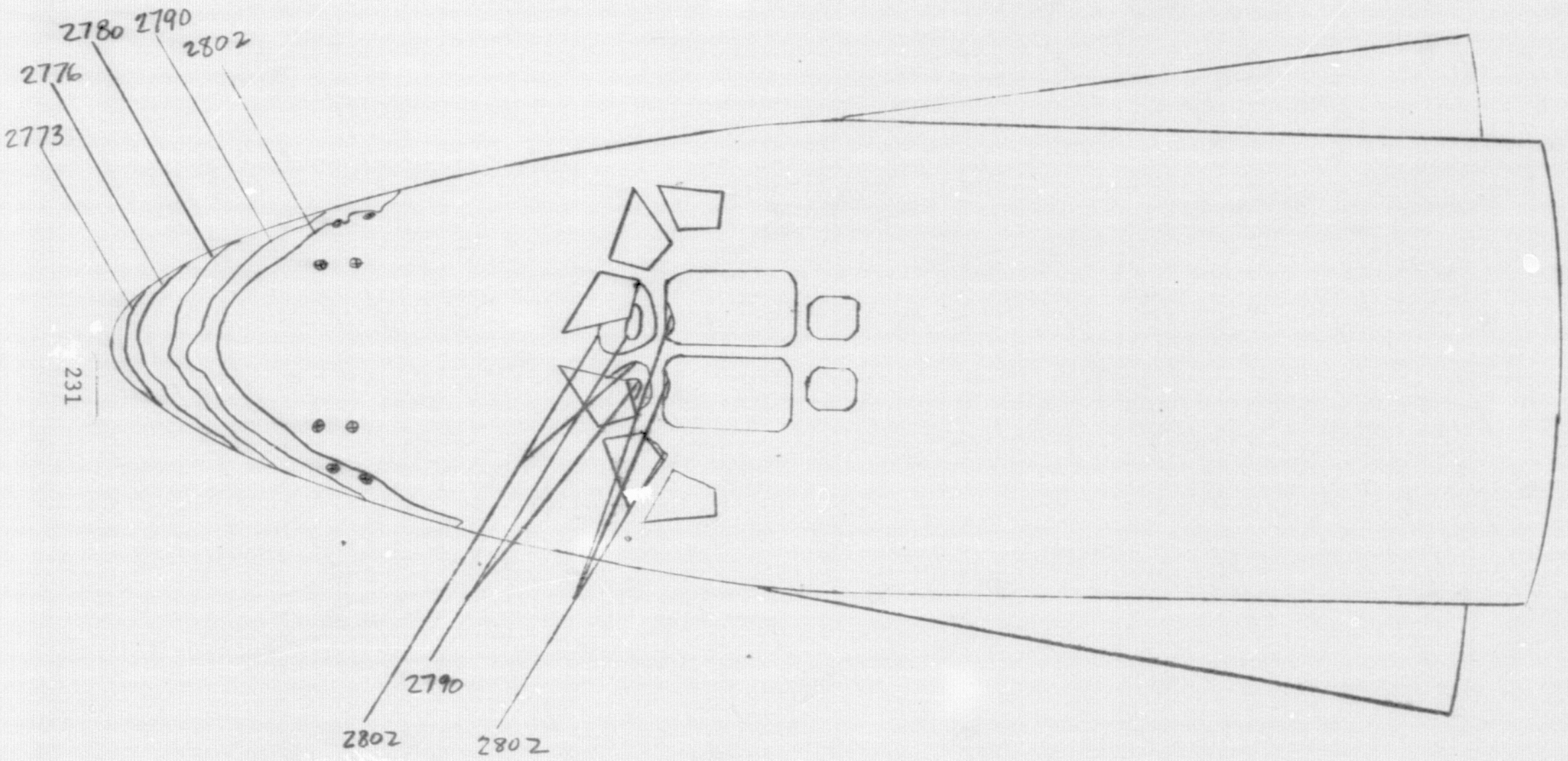
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.3	.012	.521	3718	1.084E-05	7.429E-08	5.424E 05	1.163E-02	3.646E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	79	.0486	4.820E-02	4.4432E-02
UP SIDE(OS)	8410	113	79	.0486	4.820E-02	4.4432E-02
BOTTOM(BOT)	7698	113	79	.0486	4.820E-02	4.4432E-02
TOP(TOP)	7539	113	79	.0496	4.820E-02	4.4432E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5675(113)	38.14	37.13	3.544E-04	.0305	4.338E-04	.0373	4.865E-04	.0420	1.102E-03
OS 475(113)	38.14	37.13	3.544E-04	.0305	4.338E-04	.0373	4.865E-04	.0420	1.102E-03
BOT 2767(113)	38.14	37.13	3.544E-04	.0305	4.338E-04	.0373	4.865E-04	.0420	1.102E-03
NOS 7174(113)	38.14	37.13	3.544E-04	.0305	4.338E-04	.0373	4.865E-04	.0420	1.102E-03
	38.19		MODEL HAS LEFT CENTERLINE						
TOP 5676(113)	39.22	38.21	3.493E-04	.0300	4.276E-04	.0367	4.816E-04	.0414	1.085E-03
OS 476(113)	39.22	38.21	3.493E-04	.0300	4.276E-04	.0367	4.816E-04	.0414	1.085E-03
BOT 2768(113)	39.22	38.21	3.493E-04	.0300	4.276E-04	.0367	4.816E-04	.0414	1.085E-03
NOS 7175(113)	39.22	38.21	3.493E-04	.0300	4.276E-04	.0367	4.816E-04	.0414	1.085E-03

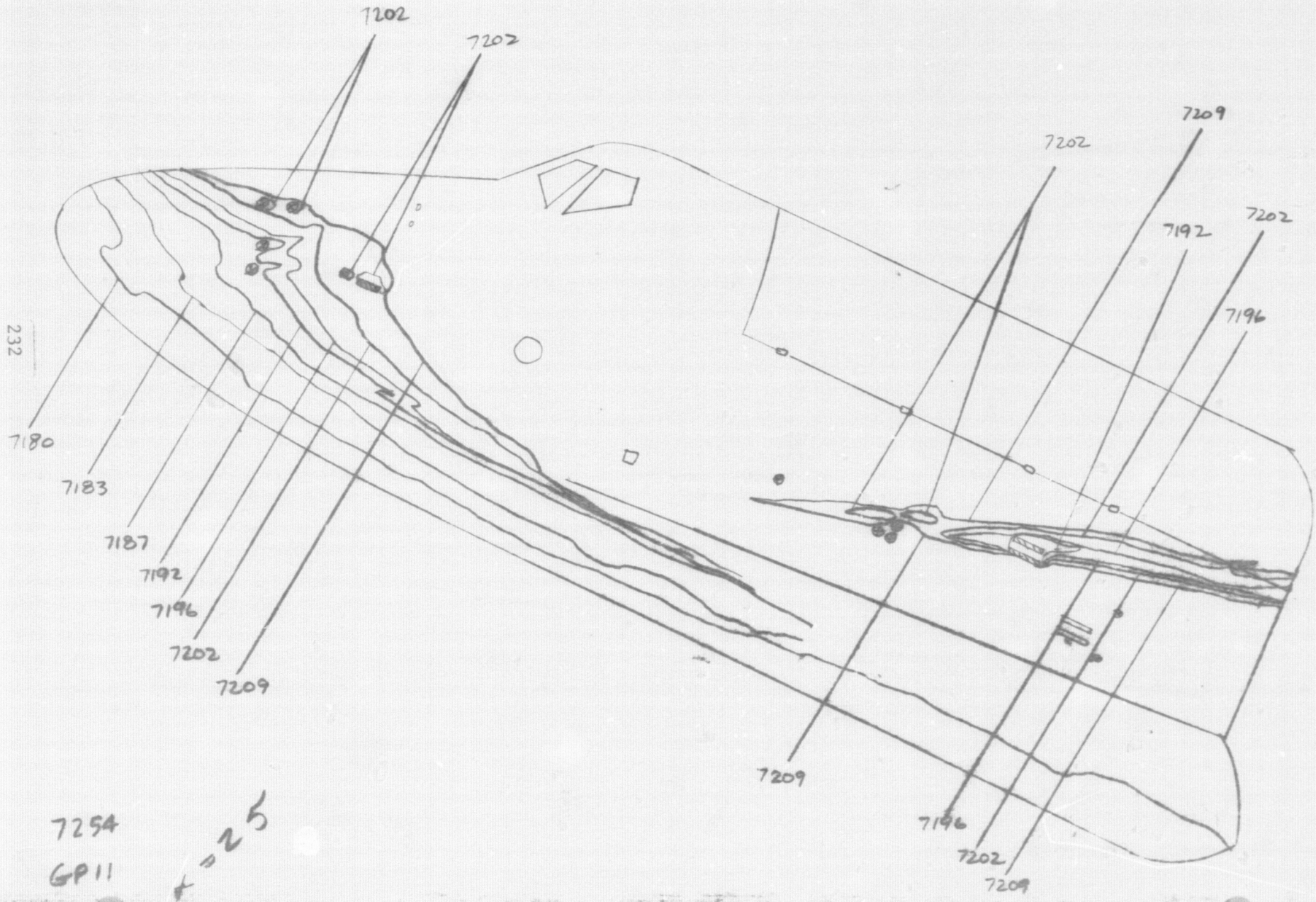
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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
11	1	7.90	103.4	1247	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
92.5	.011	.562	3723	1.043E-05	7.446E-08	5.212E 05	1.143E-02	3.718E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	81	.0486	0	0
UP SIDE(US)	8410	113	81	.0486	0	0
BOTTOM(BOT)	7698	113	81	.0486	0	0
TOP(TOP)	7539	113	81	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TO 5677(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
US 477(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 2769(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7177(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 5678(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
US 478(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 2770(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7178(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.83								
US 479(113)	2.18	1.15	1.888E-03	.1652	2.310E-03	.2022	2.603E-03	.2278	6.094E-03
HOT 2771(113)	2.18	1.15	1.888E-03	.1652	2.310E-03	.2022	2.603E-03	.2278	6.094E-03
TOP 5679(113)	2.20	1.18	1.868E-03	.1635	2.285E-03	.2001	2.575E-03	.2255	6.035E-03
NOS 7179(113)	2.20	1.18	1.868E-03	.1635	2.285E-03	.2001	2.575E-03	.2255	6.035E-03
TOP 5680(113)	3.28	2.25	1.350E-03	.1181	1.652E-03	.1445	1.861E-03	.1629	4.357E-03
US 480(113)	3.28	2.25	1.350E-03	.1181	1.652E-03	.1445	1.861E-03	.1629	4.357E-03
HOT 2772(113)	3.28	2.25	1.350E-03	.1181	1.652E-03	.1445	1.861E-03	.1629	4.357E-03
NOS 7180(113)	3.28	2.25	1.350E-03	.1181	1.652E-03	.1445	1.861E-03	.1629	4.357E-03
TOP 5681(113)	4.36	3.33	1.110E-03	.0972	1.359E-03	.1190	1.531E-03	.1340	3.588E-03
US 481(113)	4.36	3.33	1.110E-03	.0972	1.359E-03	.1190	1.531E-03	.1340	3.588E-03
HOT 2773(113)	4.38	3.35	1.106E-03	.0968	1.354E-03	.1185	1.525E-03	.1335	3.571E-03
NOS 7181(113)	4.38	3.35	1.106E-03	.0968	1.354E-03	.1185	1.525E-03	.1335	3.571E-03
TOP 5682(113)	5.46	4.43	9.625E-04	.0842	1.178E-03	.1031	1.327E-03	.1161	3.107E-03
US 482(113)	5.46	4.43	9.625E-04	.0842	1.178E-03	.1031	1.327E-03	.1161	3.107E-03
HOT 2774(113)	5.46	4.43	9.625E-04	.0842	1.178E-03	.1031	1.327E-03	.1161	3.107E-03
NOS 7182(113)	5.46	4.43	9.625E-04	.0842	1.178E-03	.1031	1.327E-03	.1161	3.107E-03
TOP 5683(113)	6.56	5.53	8.614E-04	.0754	1.054E-03	.0922	1.188E-03	.1039	2.781E-03
US 483(113)	6.56	5.53	8.614E-04	.0754	1.054E-03	.0922	1.188E-03	.1039	2.781E-03
HOT 2775(113)	6.56	5.53	8.614E-04	.0754	1.054E-03	.0922	1.188E-03	.1039	2.781E-03
NOS 7183(113)	6.56	5.53	8.614E-04	.0754	1.054E-03	.0922	1.188E-03	.1039	2.781E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
11	1	7.90	103.4	1247	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.5	.011	.502	3723	1.042E-05	7.447E-08	5.212E 05	1.143E-02	3.718E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	BAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	81	.0486	4.533E-02	4.1685E-02
UP SIDE(US)	8410	113	81	.0486	4.533E-02	4.1685E-02
HOTICH(BOT)	7698	113	81	.0486	4.533E-02	4.1685E-02
TOP(TOP)	7539	113	81	.0486	4.533E-02	4.1685E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
HOT 2776(113)	7.63	6.41	7.881E-04	.0689	9.644E-04	.0844	1.087E-03	.0950	2.542E-03
TOP 5684(113)	7.66	6.63	7.866E-04	.0688	9.626E-04	.0842	1.085E-03	.0949	2.537E-03
US 484(113)	7.66	6.63	7.866E-04	.0688	9.626E-04	.0842	1.085E-03	.0949	2.537E-03
NOS 7184(113)	7.66	6.63	7.866E-04	.0688	9.626E-04	.0842	1.085E-03	.0949	2.537E-03
TOP 5685(113)	8.74	7.71	7.296E-04	.0638	8.929E-04	.0781	1.006E-03	.0880	2.353E-03
US 485(113)	8.74	7.71	7.296E-04	.0638	8.929E-04	.0781	1.006E-03	.0880	2.353E-03
HOT 2777(113)	8.74	7.71	7.296E-04	.0638	8.929E-04	.0781	1.006E-03	.0880	2.353E-03
NOS 7185(113)	8.74	7.71	7.296E-04	.0638	8.929E-04	.0781	1.006E-03	.0880	2.353E-03
TOP 5686(113)	9.84	8.81	6.425E-04	.0597	8.352E-04	.0731	9.411E-04	.0824	2.203E-03
US 486(113)	9.84	8.81	6.425E-04	.0597	8.352E-04	.0731	9.411E-04	.0824	2.203E-03
HOT 2778(113)	9.84	8.81	6.425E-04	.0597	8.352E-04	.0731	9.411E-04	.0824	2.203E-03
NOS 7186(113)	9.84	8.81	6.425E-04	.0597	8.352E-04	.0731	9.411E-04	.0824	2.203E-03
TOP 5687(113)	10.94	9.91	6.435E-04	.0563	7.875E-04	.0689	8.873E-04	.0776	2.075E-03
US 487(113)	10.94	9.91	6.435E-04	.0563	7.875E-04	.0689	8.873E-04	.0776	2.075E-03
HOT 2779(113)	10.94	9.91	6.435E-04	.0563	7.875E-04	.0689	8.873E-04	.0776	2.075E-03
NOS 7187(113)	10.94	9.91	6.435E-04	.0563	7.875E-04	.0689	8.873E-04	.0776	2.075E-03
TOP 5688(113)	12.01	10.99	6.112E-04	.0534	7.479E-04	.0654	8.427E-04	.0737	1.969E-03
US 488(113)	12.01	10.99	6.112E-04	.0534	7.479E-04	.0654	8.427E-04	.0737	1.969E-03
HOT 2780(113)	12.01	10.99	6.112E-04	.0534	7.479E-04	.0654	8.427E-04	.0737	1.969E-03
NOS 7188(113)	12.01	10.99	6.112E-04	.0534	7.479E-04	.0654	8.427E-04	.0737	1.969E-03
TOP 5689(113)	13.12	12.09	5.827E-04	.0509	7.130E-04	.0623	8.034E-04	.0702	1.878E-03
US 489(113)	13.12	12.09	5.827E-04	.0509	7.130E-04	.0623	8.034E-04	.0702	1.878E-03
HOT 2781(113)	13.12	12.09	5.827E-04	.0509	7.130E-04	.0623	8.034E-04	.0702	1.878E-03
NOS 7189(113)	13.12	12.09	5.827E-04	.0509	7.130E-04	.0623	8.034E-04	.0702	1.878E-03
TOP 5690(113)	14.22	13.19	5.578E-04	.0487	6.826E-04	.0596	7.691E-04	.0672	1.796E-03
US 490(113)	14.22	13.19	5.578E-04	.0487	6.826E-04	.0596	7.691E-04	.0672	1.796E-03
HOT 2782(113)	14.22	13.19	5.578E-04	.0487	6.826E-04	.0596	7.691E-04	.0672	1.796E-03
NOS 7190(113)	14.22	13.19	5.578E-04	.0487	6.826E-04	.0596	7.691E-04	.0672	1.796E-03

NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
11	1	7.90	103.7	1247	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.5	.012	.594	3723	1.045E-05	7.447E-08	5.226E 05	1.144E-02	3.713E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7254	113	81	.0486	4.533E-02	4.1685E-02
OP SIDE(OS)	8410	113	81	.0486	4.533E-02	4.1685E-02
HOTTOM(HOT)	7698	113	81	.0486	4.533E-02	4.1685E-02
TOP(T P)	7539	113	81	.0486	4.533E-02	4.1685E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
OS 491(113)	15.29	14.27	5.364E-04	.0468	6.564E-04	.0573	7.396E-04	.0646	1.725E-03
HOT 2783(113)	15.29	14.27	5.364E-04	.0468	6.564E-04	.0573	7.396E-04	.0646	1.725E-03
TOP 5691(113)	15.32	14.29	5.359E-04	.0468	6.558E-04	.0573	7.389E-04	.0646	1.727E-03
NOS 7191(113)	15.32	14.29	5.359E-04	.0468	6.558E-04	.0573	7.389E-04	.0646	1.727E-03
TOP 5692(113)	16.39	15.37	5.168E-04	.0451	6.324E-04	.0552	7.126E-04	.0622	1.662E-03
OS 492(113)	16.39	15.37	5.168E-04	.0451	6.324E-04	.0552	7.126E-04	.0622	1.662E-03
HOT 2784(113)	16.39	15.37	5.168E-04	.0451	6.324E-04	.0552	7.126E-04	.0622	1.662E-03
NOS 7192(113)	16.39	15.37	5.168E-04	.0451	6.324E-04	.0552	7.126E-04	.0622	1.662E-03
TOP 5693(113)	17.50	16.47	4.992E-04	.0436	6.109E-04	.0533	6.883E-04	.0601	1.604E-03
OS 493(113)	17.50	16.47	4.992E-04	.0436	6.109E-04	.0533	6.883E-04	.0601	1.604E-03
HOT 2785(113)	17.50	16.47	4.992E-04	.0436	6.109E-04	.0533	6.883E-04	.0601	1.604E-03
NOS 7193(113)	17.50	16.47	4.992E-04	.0436	6.109E-04	.0533	6.883E-04	.0601	1.604E-03
HOT 2786(113)	18.57	17.55	4.837E-04	.0422	5.919E-04	.0517	6.669E-04	.0582	1.554E-03
TOP 5694(113)	18.60	17.57	4.833E-04	.0422	5.914E-04	.0516	6.664E-04	.0582	1.553E-03
OS 494(113)	18.60	17.57	4.833E-04	.0422	5.914E-04	.0516	6.664E-04	.0582	1.553E-03
NOS 7194(113)	18.60	17.57	4.833E-04	.0422	5.914E-04	.0516	6.664E-04	.0582	1.553E-03
TOP 5695(113)	19.67	18.65	4.692E-04	.0410	5.741E-04	.0501	6.469E-04	.0565	1.507E-03
OS 495(113)	19.67	18.65	4.692E-04	.0410	5.741E-04	.0501	6.469E-04	.0565	1.507E-03
HOT 2787(113)	19.67	18.65	4.692E-04	.0410	5.741E-04	.0501	6.469E-04	.0565	1.507E-03
NOS 7195(113)	19.67	18.65	4.692E-04	.0410	5.741E-04	.0501	6.469E-04	.0565	1.507E-03
TOP 5696(113)	20.77	19.75	4.559E-04	.0398	5.579E-04	.0487	6.286E-04	.0548	1.463E-03
OS 496(113)	20.77	19.75	4.559E-04	.0398	5.579E-04	.0487	6.286E-04	.0548	1.463E-03
HOT 2788(113)	20.77	19.75	4.559E-04	.0398	5.579E-04	.0487	6.286E-04	.0548	1.463E-03
NOS 7196(113)	20.77	19.75	4.559E-04	.0398	5.579E-04	.0487	6.286E-04	.0548	1.463E-03
TOP 5697(113)	21.88	20.85	4.437E-04	.0387	5.430E-04	.0474	6.118E-04	.0534	1.424E-03
OS 497(113)	21.88	20.85	4.437E-04	.0387	5.430E-04	.0474	6.118E-04	.0534	1.424E-03
HOT 2789(113)	21.88	20.85	4.437E-04	.0387	5.430E-04	.0474	6.118E-04	.0534	1.424E-03
NOS 7197(113)	21.88	20.85	4.437E-04	.0387	5.430E-04	.0474	6.118E-04	.0534	1.424E-03

3/29/74

NASA-R1 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
11	1	7.90	104.0	1247	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
92.5	.012	.505	3723	1.048E-05	7.448E-08	5.240E 05	1.146E-02	3.70AE-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	81	.0486	4.533E-02	4.1685E-02
OP SIDE(OS)	8410	113	81	.0486	4.533E-02	4.1685E-02
HOT(BOT)	7698	113	81	.0486	4.533E-02	4.1685E-02
TOP(TOP)	7539	113	81	.0486	4.533E-02	4.1685E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5698(113)	22.95	21.93	4.327E-04	.0377	5.295E-04	.0462	5.966E-04	.0521	1.389E-03
OS 498(113)	22.95	21.93	4.327E-04	.0377	5.295E-04	.0462	5.966E-04	.0521	1.389E-03
HOT 2790(113)	22.95	21.93	4.327E-04	.0377	5.295E-04	.0462	5.966E-04	.0521	1.389E-03
NOS 7198(113)	22.95	21.93	4.327E-04	.0377	5.295E-04	.0462	5.966E-04	.0521	1.389E-03
TOP 5699(113)	24.05	23.03	4.222E-04	.0368	5.166E-04	.0451	5.821E-04	.0508	1.355E-03
OS 499(113)	24.05	23.03	4.222E-04	.0368	5.166E-04	.0451	5.821E-04	.0508	1.355E-03
HOT 2791(113)	24.05	23.03	4.222E-04	.0368	5.166E-04	.0451	5.821E-04	.0508	1.355E-03
NOS 7199(113)	24.05	23.03	4.222E-04	.0368	5.166E-04	.0451	5.821E-04	.0508	1.355E-03
TOP 5700(113)	25.15	24.13	4.124E-04	.0360	5.047E-04	.0440	5.687E-04	.0496	1.323E-03
OS 500(113)	25.15	24.13	4.124E-04	.0360	5.047E-04	.0440	5.687E-04	.0496	1.323E-03
HOT 2792(113)	25.15	24.13	4.124E-04	.0360	5.047E-04	.0440	5.687E-04	.0496	1.323E-03
NOS 7200(113)	25.15	24.13	4.124E-04	.0360	5.047E-04	.0440	5.687E-04	.0496	1.323E-03
HOT 2793(113)	26.23	25.20	4.035E-04	.0352	4.938E-04	.0431	5.564E-04	.0485	1.294E-03
TOP 5701(113)	26.26	25.23	4.033E-04	.0352	4.936E-04	.0430	5.561E-04	.0485	1.292E-03
OS 501(113)	26.26	25.23	4.033E-04	.0352	4.936E-04	.0430	5.561E-04	.0485	1.292E-03
NOS 7201(113)	26.26	25.23	4.033E-04	.0352	4.936E-04	.0430	5.561E-04	.0485	1.292E-03
TOP 5702(113)	27.33	26.31	3.950E-04	.0344	4.834E-04	.0422	5.446E-04	.0475	1.267E-03
OS 502(113)	27.33	26.31	3.950E-04	.0344	4.834E-04	.0422	5.446E-04	.0475	1.267E-03
HOT 2794(113)	27.33	26.31	3.950E-04	.0344	4.834E-04	.0422	5.446E-04	.0475	1.267E-03
NOS 7202(113)	27.33	26.31	3.950E-04	.0344	4.834E-04	.0422	5.446E-04	.0475	1.267E-03
TOP 5703(113)	28.43	27.41	3.870E-04	.0337	4.736E-04	.0413	5.336E-04	.0465	1.240E-03
OS 503(113)	28.43	27.41	3.870E-04	.0337	4.736E-04	.0413	5.336E-04	.0465	1.240E-03
HOT 2795(113)	28.43	27.41	3.870E-04	.0337	4.736E-04	.0413	5.336E-04	.0465	1.240E-03
NOS 7203(113)	28.43	27.41	3.870E-04	.0337	4.736E-04	.0413	5.336E-04	.0465	1.240E-03
TOP 5704(113)	29.53	28.51	3.794E-04	.0331	4.643E-04	.0405	5.232E-04	.0456	1.216E-03
OS 504(113)	29.53	28.51	3.794E-04	.0331	4.643E-04	.0405	5.232E-04	.0456	1.216E-03
HOT 2796(113)	29.53	28.51	3.794E-04	.0331	4.643E-04	.0405	5.232E-04	.0456	1.216E-03
NOS 7204(113)	29.53	28.51	3.794E-04	.0331	4.643E-04	.0405	5.232E-04	.0456	1.216E-03

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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
11	1	7.90	104.2	1247	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.5	.012	.566	3723	1.050E-05	7.449E-08	5.250E 05	1.147E-02	3.705E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7254	113	81	.0486	4.533E-02	4.1685E-02
UP SIDE(US)	8410	113	81	.0486	4.533E-02	4.1685E-02
BOTTOM(BOT)	7698	113	81	.0486	4.533E-02	4.1685E-02
TOP(TOP)	7539	113	81	.0486	4.533E-02	4.1685E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5705(113)	30.61	29.58	3.725E-04	.0325	4.558E-04	.0397	5.136E-04	.0447	1.192E-03
US 505(113)	30.61	29.58	3.725E-04	.0325	4.558E-04	.0397	5.136E-04	.0447	1.192E-03
HOT 2797(113)	30.61	29.58	3.725E-04	.0325	4.558E-04	.0397	5.136E-04	.0447	1.192E-03
NOS 7205(113)	30.61	29.58	3.725E-04	.0325	4.558E-04	.0397	5.136E-04	.0447	1.192E-03
TOP 5706(113)	31.71	30.69	3.657E-04	.0319	4.475E-04	.0390	5.043E-04	.0439	1.171E-03
US 506(113)	31.71	30.69	3.657E-04	.0319	4.475E-04	.0390	5.043E-04	.0439	1.171E-03
HOT 2798(113)	31.71	30.69	3.657E-04	.0319	4.475E-04	.0390	5.043E-04	.0439	1.171E-03
NOS 7206(113)	31.71	30.69	3.657E-04	.0319	4.475E-04	.0390	5.043E-04	.0439	1.171E-03
TOP 5707(113)	32.81	31.79	3.593E-04	.0313	4.397E-04	.0383	4.955E-04	.0432	1.151E-03
US 507(113)	32.81	31.79	3.593E-04	.0313	4.397E-04	.0383	4.955E-04	.0432	1.151E-03
HOT 2799(113)	32.81	31.79	3.593E-04	.0313	4.397E-04	.0383	4.955E-04	.0432	1.151E-03
NOS 7207(113)	32.81	31.79	3.593E-04	.0313	4.397E-04	.0383	4.955E-04	.0432	1.151E-03
TOP 5708(113)	33.89	32.86	3.534E-04	.0308	4.325E-04	.0377	4.873E-04	.0424	1.130E-03
US 508(113)	33.89	32.86	3.534E-04	.0308	4.325E-04	.0377	4.873E-04	.0424	1.130E-03
HOT 2800(113)	33.89	32.86	3.534E-04	.0308	4.325E-04	.0377	4.873E-04	.0424	1.130E-03
NOS 7208(113)	33.91	32.89	3.533E-04	.0308	4.323E-04	.0377	4.871E-04	.0424	1.131E-03
TOP 5709(113)	34.99	33.96	3.476E-04	.0303	4.254E-04	.0370	4.793E-04	.0417	1.111E-03
US 509(113)	34.99	33.96	3.476E-04	.0303	4.254E-04	.0370	4.793E-04	.0417	1.111E-03
HOT 2801(113)	34.99	33.96	3.476E-04	.0303	4.254E-04	.0370	4.793E-04	.0417	1.111E-03
NOS 7209(113)	34.99	33.96	3.476E-04	.0303	4.254E-04	.0370	4.793E-04	.0417	1.111E-03
TOP 5710(113)	36.09	35.07	3.421E-04	.0298	4.187E-04	.0364	4.717E-04	.0411	1.093E-03
US 510(113)	36.09	35.07	3.421E-04	.0298	4.187E-04	.0364	4.717E-04	.0411	1.093E-03
HOT 2802(113)	36.09	35.07	3.421E-04	.0298	4.187E-04	.0364	4.717E-04	.0411	1.093E-03
NOS 7210(113)	36.09	35.07	3.421E-04	.0298	4.187E-04	.0364	4.717E-04	.0411	1.093E-03
	36.42		MODEL HAS LEFT CENTERLINE						

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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA52E

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
11	1	7.90	104.5	1247	24.98	5.02	30.00	0	0

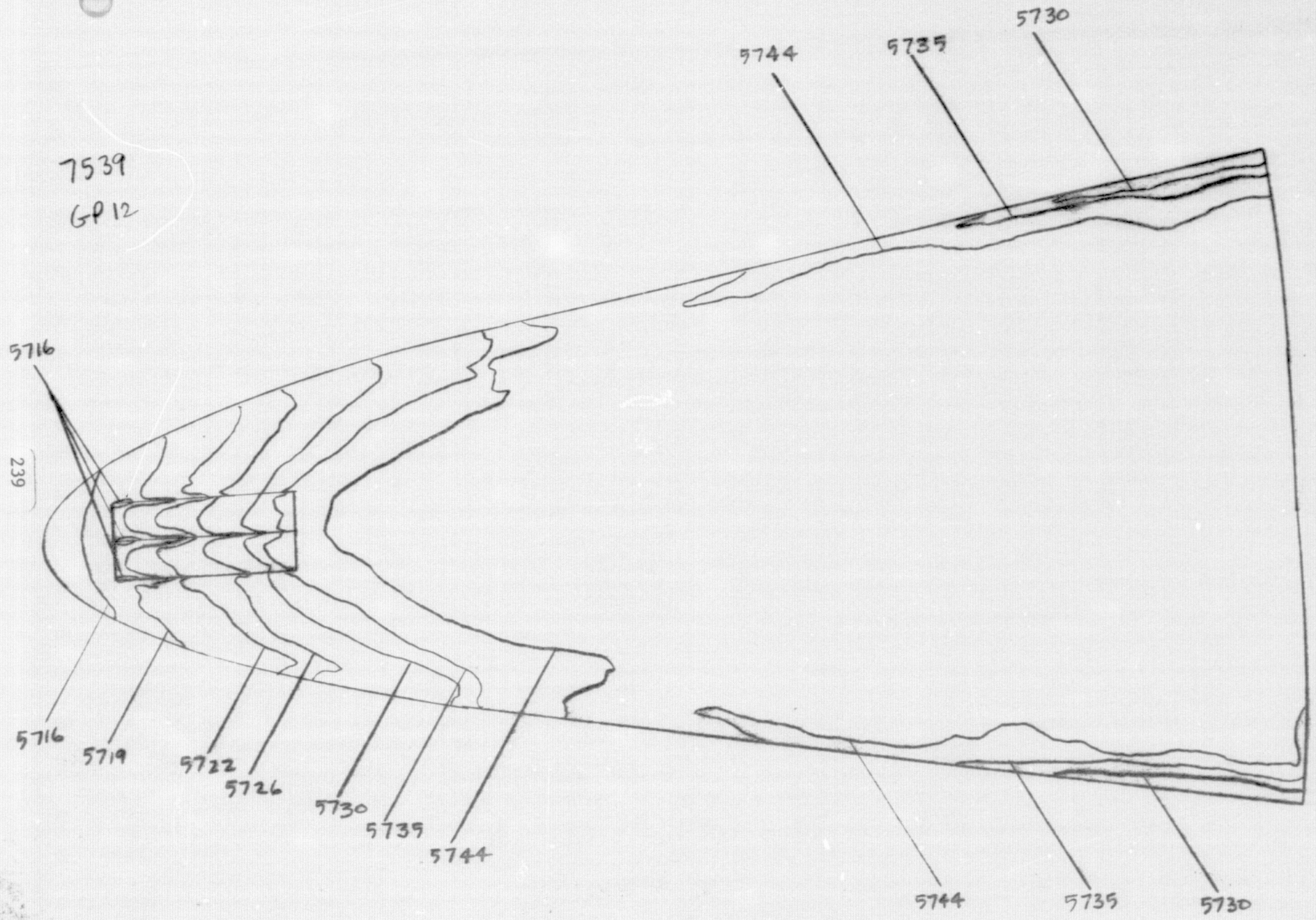
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.5	.012	.507	3724	1.053E-05	7.449E-08	5.265E 05	1.149E-02	3.699E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	81	.0486	4.533E-02	4.1685E-02
OP SIDE(OS)	8410	113	81	.0486	4.533E-02	4.1685E-02
BOTTOM(BOT)	7698	113	81	.0486	4.533E-02	4.1685E-02
TOP(TOP)	7539	113	81	.0486	4.533E-02	4.1685E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
HOT 2803(113)	37.17	36.14	3.370E-04	.0293	4.124E-04	.0359	4.647E-04	.0404	1.076E-03
TOP 5711(113)	37.19	36.17	3.369E-04	.0293	4.122E-04	.0359	4.645E-04	.0404	1.076E-03
OS 511(113)	37.19	36.17	3.369E-04	.0293	4.122E-04	.0359	4.645E-04	.0404	1.076E-03
NOS 7211(113)	37.19	36.17	3.369E-04	.0293	4.122E-04	.0359	4.645E-04	.0404	1.076E-03

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REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR


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3/29/74

NASA-RI OH5J

VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
12	1	7.90	103.9	1250	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.7	.012	.50E	3727	1.045E-05	7.464E-08	5.218E 05	1.146E-02	3.715E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	0	0
UP SIDE(US)	8410	150	81	.0505	0	0
BOTTOM(BOT)	7698	150	81	.0505	0	0
TOP(TOP)	7539	150	81	.0505	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TO 5712(150)	.05		MODEL HAS NOT REACHED CENTERLINE						
US 512(150)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 7212(150)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 5713(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
US 513(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7213(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.83								
TOP 5714(150)	2.40	1.38	4.022E-03	.3505	4.975E-03	.4335	5.643E-03	.4917	1.287E-02
US 514(150)	2.40	1.38	4.022E-03	.3505	4.975E-03	.4335	5.643E-03	.4917	1.287E-02
NOS 7214(150)	2.40	1.38	4.022E-03	.3505	4.975E-03	.4335	5.643E-03	.4917	1.287E-02
TOP 5715(150)	3.48	2.45	3.014E-03	.2628	3.728E-03	.3251	4.228E-03	.3687	9.663E-03
US 515(150)	3.48	2.45	3.014E-03	.2628	3.728E-03	.3251	4.228E-03	.3687	9.663E-03
NOS 7215(150)	3.48	2.45	3.014E-03	.2628	3.728E-03	.3251	4.228E-03	.3687	9.663E-03
TOP 5716(150)	4.58	3.55	2.504E-03	.2183	3.097E-03	.2700	3.512E-03	.3062	8.020E-03
US 516(150)	4.58	3.55	2.504E-03	.2183	3.097E-03	.2700	3.512E-03	.3062	8.020E-03
NOS 7216(150)	4.58	3.55	2.504E-03	.2183	3.097E-03	.2700	3.512E-03	.3062	8.020E-03
TOP 5717(150)	5.66	4.63	2.193E-03	.1911	2.713E-03	.2364	3.077E-03	.2681	7.020E-03
US 517(150)	5.66	4.63	2.193E-03	.1911	2.713E-03	.2364	3.077E-03	.2681	7.020E-03
NOS 7217(150)	5.66	4.63	2.193E-03	.1911	2.713E-03	.2364	3.077E-03	.2681	7.020E-03
TOP 5718(150)	6.73	5.71	1.976E-03	.1722	2.444E-03	.2131	2.772E-03	.2416	6.330E-03
US 518(150)	6.73	5.71	1.976E-03	.1722	2.444E-03	.2131	2.772E-03	.2416	6.330E-03
NOS 7218(150)	6.73	5.71	1.976E-03	.1722	2.444E-03	.2131	2.772E-03	.2416	6.330E-03
TOP 5719(150)	7.81	6.78	1.812E-03	.1578	2.242E-03	.1952	2.542E-03	.2214	5.795E-03
US 519(150)	7.81	6.78	1.812E-03	.1578	2.242E-03	.1952	2.542E-03	.2214	5.795E-03
NOS 7219(150)	7.81	6.78	1.812E-03	.1578	2.242E-03	.1952	2.542E-03	.2214	5.795E-03
TOP 5720(150)	8.89	7.86	1.684E-03	.1466	2.083E-03	.1814	2.362E-03	.2057	5.383E-03
US 520(150)	8.89	7.86	1.684E-03	.1466	2.083E-03	.1814	2.362E-03	.2057	5.383E-03
NOS 7220(150)	8.89	7.86	1.684E-03	.1466	2.083E-03	.1814	2.362E-03	.2057	5.383E-03

3/29/74

NASA-R1 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
12	1	7.90	104.3	1250	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.7	.012	.506	3724	1.049E-05	7.465E-08	5.237E 05	1.148E-02	3.708E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.732E-02	9.3470E-02
UP SIDE(US)	8410	150	81	.0505	9.732E-02	9.3470E-02
BOTTOM(BOT)	7598	150	81	.0505	9.732E-02	9.3470E-02
TOP(TOP)	7539	150	81	.0505	9.732E-02	9.3470E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5721(150)	9.96	8.94	1.579E-03	.1375	1.953E-03	.1701	2.215E-03	.1929	5.049E-03
US 521(150)	9.96	8.94	1.579E-03	.1375	1.953E-03	.1701	2.215E-03	.1929	5.049E-03
NOS 7221(150)	9.96	8.94	1.579E-03	.1375	1.953E-03	.1701	2.215E-03	.1929	5.049E-03
TOP 5722(150)	11.06	10.04	1.490E-03	.1297	1.843E-03	.1604	2.090E-03	.1819	4.759E-03
OS 522(150)	11.06	10.04	1.490E-03	.1297	1.843E-03	.1604	2.090E-03	.1819	4.759E-03
NOS 7222(150)	11.06	10.04	1.490E-03	.1297	1.843E-03	.1604	2.090E-03	.1819	4.759E-03
TOP 5723(150)	12.14	11.11	1.416E-03	.1233	1.751E-03	.1525	1.986E-03	.1729	4.523E-03
US 523(150)	12.14	11.11	1.416E-03	.1233	1.751E-03	.1525	1.986E-03	.1729	4.523E-03
NOS 7223(150)	12.14	11.11	1.416E-03	.1233	1.751E-03	.1525	1.986E-03	.1729	4.523E-03
TOP 5724(150)	13.22	12.19	1.352E-03	.1177	1.672E-03	.1456	1.897E-03	.1651	4.319E-03
OS 524(150)	13.22	12.19	1.352E-03	.1177	1.672E-03	.1456	1.897E-03	.1651	4.319E-03
NOS 7224(150)	13.22	12.19	1.352E-03	.1177	1.672E-03	.1456	1.897E-03	.1651	4.319E-03
TOP 5725(150)	14.29	13.27	1.296E-03	.1128	1.603E-03	.1395	1.818E-03	.1582	4.136E-03
US 525(150)	14.29	13.27	1.296E-03	.1128	1.603E-03	.1395	1.818E-03	.1582	4.136E-03
NOS 7225(150)	14.29	13.27	1.296E-03	.1128	1.603E-03	.1395	1.818E-03	.1582	4.136E-03
TOP 5726(150)	15.37	14.34	1.246E-03	.1085	1.542E-03	.1342	1.748E-03	.1522	3.981E-03
OS 526(150)	15.37	14.34	1.246E-03	.1085	1.542E-03	.1342	1.748E-03	.1522	3.981E-03
NOS 7226(150)	15.37	14.34	1.246E-03	.1085	1.542E-03	.1342	1.748E-03	.1522	3.981E-03
TOP 5727(150)	16.47	15.44	1.201E-03	.1045	1.486E-03	.1293	1.685E-03	.1466	3.833E-03
US 527(150)	16.47	15.44	1.201E-03	.1045	1.486E-03	.1293	1.685E-03	.1466	3.833E-03
NOS 7227(150)	16.47	15.44	1.201E-03	.1045	1.486E-03	.1293	1.685E-03	.1466	3.833E-03
TOP 5728(150)	17.55	16.52	1.161E-03	.1010	1.436E-03	.1249	1.629E-03	.1417	3.703E-03
US 528(150)	17.55	16.52	1.161E-03	.1010	1.436E-03	.1249	1.629E-03	.1417	3.703E-03
NOS 7228(150)	17.55	16.52	1.161E-03	.1010	1.436E-03	.1249	1.629E-03	.1417	3.703E-03
TOP 5729(150)	18.62	17.60	1.125E-03	.0979	1.392E-03	.1210	1.579E-03	.1373	3.588E-03
US 529(150)	18.62	17.60	1.125E-03	.0979	1.392E-03	.1210	1.579E-03	.1373	3.588E-03
NOS 7229(150)	18.62	17.60	1.125E-03	.0979	1.392E-03	.1210	1.579E-03	.1373	3.588E-03

NASA-RI 0450

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
12	1	7.90	104.6	1250	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.7	.012	.568	3728	1.052E-05	7.465E-08	5.253E 05	1.150E-02	3.702E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCKK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.732E-02	9.3470E-02
UP SIDE(OS)	8410	150	81	.0505	9.732E-02	9.3470E-02
BOTTOM(BOT)	7698	150	81	.0505	9.732E-02	9.3470E-02
TOP(TOP)	7539	150	81	.0505	9.732E-02	9.3470E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5730(150)	19.70	18.67	1.092E-03	.0949	1.351E-03	.1174	1.532E-03	.1332	3.479E-03
OS 530(150)	19.70	18.67	1.092E-03	.0949	1.351E-03	.1174	1.532E-03	.1332	3.479E-03
NOS 7230(150)	19.70	18.67	1.092E-03	.0949	1.351E-03	.1174	1.532E-03	.1332	3.479E-03
TOP 5731(150)	20.77	19.75	1.062E-03	.0923	1.314E-03	.1142	1.490E-03	.1295	3.383E-03
OS 531(150)	20.77	19.75	1.062E-03	.0923	1.314E-03	.1142	1.490E-03	.1295	3.383E-03
NOS 7231(150)	20.77	19.75	1.062E-03	.0923	1.314E-03	.1142	1.490E-03	.1295	3.383E-03
TOP 5732(150)	21.88	20.85	1.034E-03	.0898	1.279E-03	.1111	1.450E-03	.1260	3.289E-03
OS 532(150)	21.88	20.85	1.034E-03	.0898	1.279E-03	.1111	1.450E-03	.1260	3.289E-03
NOS 7232(150)	21.88	20.85	1.034E-03	.0898	1.279E-03	.1111	1.450E-03	.1260	3.289E-03
TOP 5733(150)	22.95	21.93	1.008E-03	.0876	1.247E-03	.1084	1.414E-03	.1229	3.211E-03
OS 533(150)	22.95	21.93	1.008E-03	.0876	1.247E-03	.1084	1.414E-03	.1229	3.211E-03
NOS 7233(150)	22.95	21.93	1.008E-03	.0876	1.247E-03	.1084	1.414E-03	.1229	3.211E-03
TOP 5734(150)	24.03	23.00	9.842E-04	.0855	1.217E-03	.1058	1.381E-03	.1199	3.132E-03
OS 534(150)	24.03	23.00	9.842E-04	.0855	1.217E-03	.1058	1.381E-03	.1199	3.132E-03
NOS 7234(150)	24.03	23.00	9.842E-04	.0855	1.217E-03	.1058	1.381E-03	.1199	3.132E-03
TOP 5735(150)	25.10	24.08	9.619E-04	.0834	1.190E-03	.1032	1.349E-03	.1170	3.049E-03
OS 535(150)	25.10	24.08	9.619E-04	.0834	1.190E-03	.1032	1.349E-03	.1170	3.049E-03
NOS 7235(150)	25.10	24.08	9.619E-04	.0834	1.190E-03	.1032	1.349E-03	.1170	3.049E-03
TOP 5736(150)	26.18	25.15	9.411E-04	.0817	1.164E-03	.1010	1.320E-03	.1146	2.989E-03
OS 536(150)	26.18	25.15	9.411E-04	.0817	1.164E-03	.1010	1.320E-03	.1146	2.989E-03
NOS 7236(150)	26.18	25.15	9.411E-04	.0817	1.164E-03	.1010	1.320E-03	.1146	2.989E-03
TOP 5737(150)	27.28	26.26	9.212E-04	.0800	1.139E-03	.0989	1.292E-03	.1122	2.929E-03
OS 537(150)	27.28	26.26	9.212E-04	.0800	1.139E-03	.0989	1.292E-03	.1122	2.929E-03
NOS 7237(150)	27.28	26.26	9.212E-04	.0800	1.139E-03	.0989	1.292E-03	.1122	2.929E-03
TOP 5738(150)	28.36	27.33	9.029E-04	.0784	1.117E-03	.0970	1.267E-03	.1100	2.870E-03
OS 538(150)	28.36	27.33	9.029E-04	.0784	1.117E-03	.0970	1.267E-03	.1100	2.870E-03
NOS 7238(150)	28.36	27.33	9.029E-04	.0784	1.117E-03	.0970	1.267E-03	.1100	2.870E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

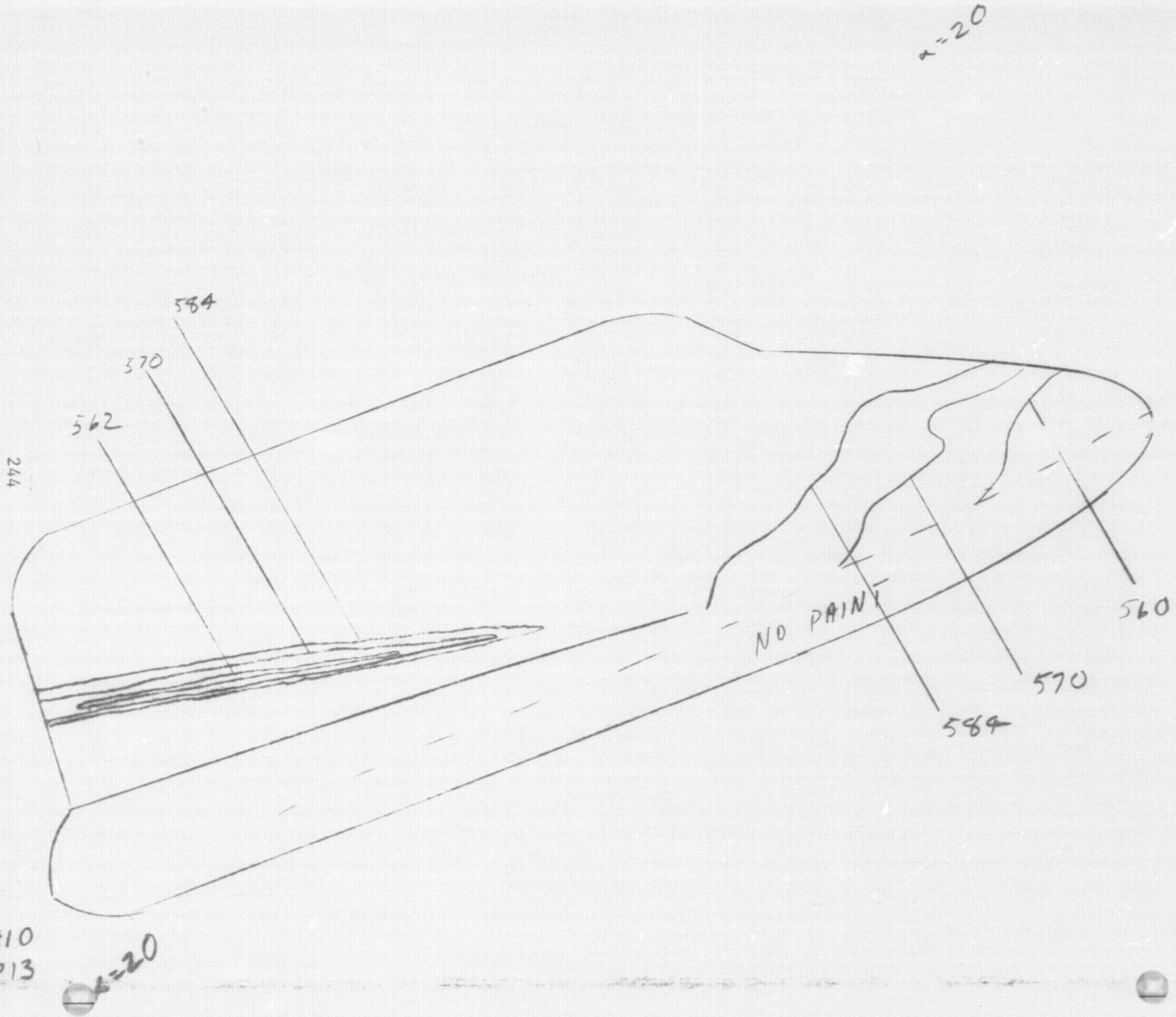
VA526

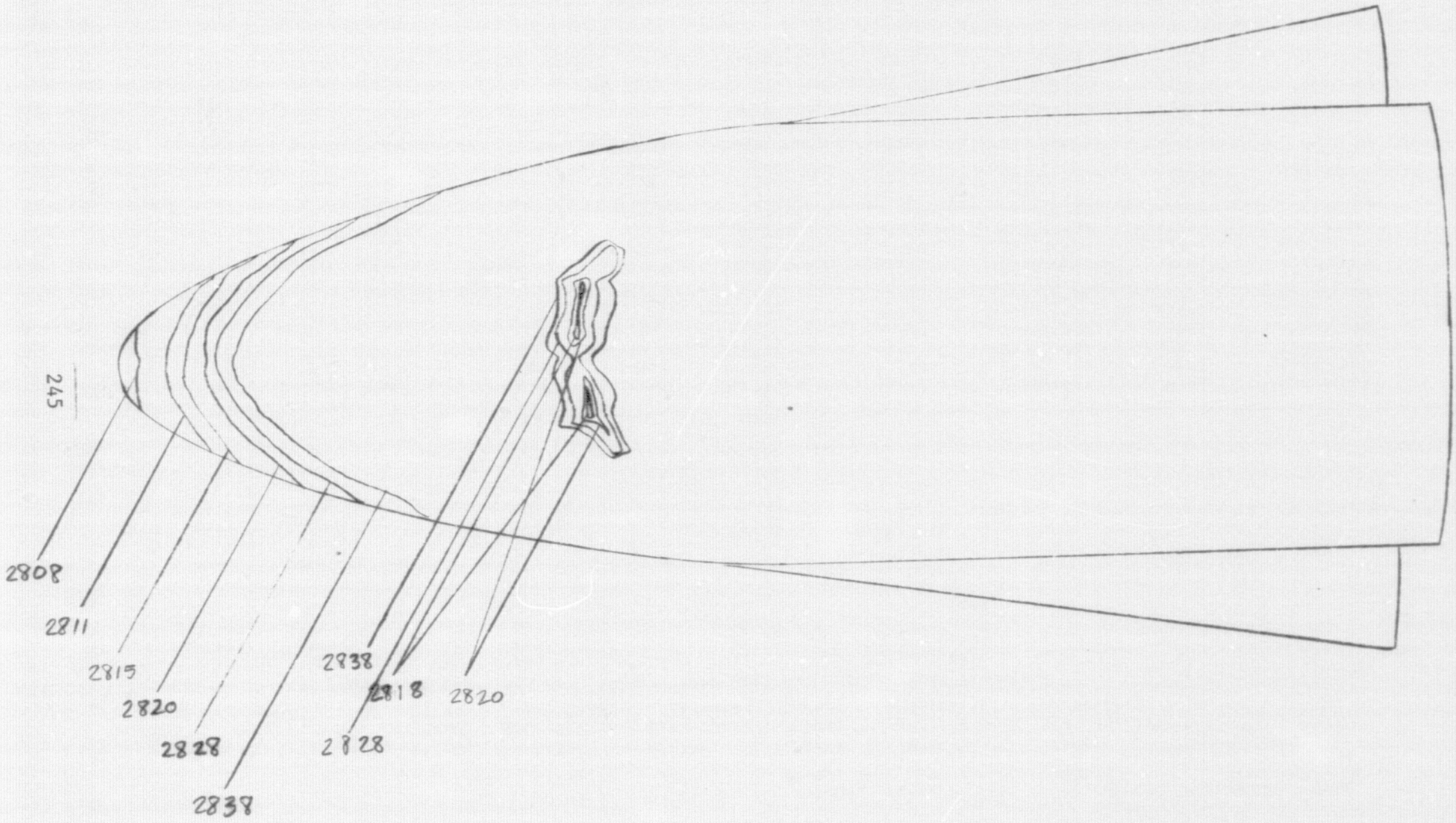
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
12	1	7.90	104.9	1250	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.7	.012	.505	3728	1.055E-05	7.460E-08	5.267E 05	1.152E-02	3.697E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXX)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.732E-02	9.3470E-02
UP SIDE(US)	8410	150	81	.0505	9.732E-02	9.3470E-02
BOTTOM(BOT)	7698	150	81	.0505	9.732E-02	9.3470E-02
TOP(TOP)	7539	150	81	.0505	9.732E-02	9.3470E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5739(150)	29.43	28.41	8.856E-04	.0769	1.095E-03	.0951	1.242E-03	.1078	2.813E-03
US 539(150)	29.43	28.41	8.856E-04	.0769	1.095E-03	.0951	1.242E-03	.1078	2.813E-03
NOS 7239(150)	29.43	28.41	8.856E-04	.0769	1.095E-03	.0951	1.242E-03	.1078	2.813E-03
TOP 5740(150)	30.51	29.48	8.693E-04	.0755	1.075E-03	.0933	1.219E-03	.1058	2.761E-03
US 540(150)	30.51	29.48	8.693E-04	.0755	1.075E-03	.0933	1.219E-03	.1058	2.761E-03
NOS 7240(150)	30.51	29.48	8.693E-04	.0755	1.075E-03	.0933	1.219E-03	.1058	2.761E-03
TOP 5741(150)	31.59	30.56	8.538E-04	.0741	1.056E-03	.0917	1.198E-03	.1040	2.712E-03
US 541(150)	31.59	30.56	8.538E-04	.0741	1.056E-03	.0917	1.198E-03	.1040	2.712E-03
NOS 7241(150)	31.59	30.56	8.538E-04	.0741	1.056E-03	.0917	1.198E-03	.1040	2.712E-03
TOP 5742(150)	32.69	31.66	8.389E-04	.0728	1.038E-03	.0901	1.177E-03	.1021	2.664E-03
US 542(150)	32.69	31.66	8.389E-04	.0728	1.038E-03	.0901	1.177E-03	.1021	2.664E-03
NOS 7242(150)	32.69	31.66	8.389E-04	.0728	1.038E-03	.0901	1.177E-03	.1021	2.664E-03
TOP 5743(150)	33.76	32.74	8.250E-04	.0750	1.020E-03	.0928	1.157E-03	.1052	2.285E-03
US 543(150)	33.76	32.74	8.250E-04	.0750	1.020E-03	.0928	1.157E-03	.1052	2.295E-03
NOS 7243(150)	33.76	32.74	8.250E-04	.0750	1.020E-03	.0928	1.157E-03	.1052	2.285E-03
TOP 5744(150)	34.84	33.81	8.117E-04	.0707	1.004E-03	.0874	1.139E-03	.0991	2.557E-03
US 544(150)	34.84	33.81	8.117E-04	.0707	1.004E-03	.0874	1.139E-03	.0991	2.557E-03
NOS 7244(150)	34.84	33.81	8.117E-04	.0707	1.004E-03	.0874	1.139E-03	.0991	2.557E-03
	35.52		MODEL HAS LEFT CENTERLINE						
TOP 5745(150)	35.92	34.89	7.991E-04	.0698	9.884E-04	.0863	1.121E-03	.0979	2.480E-03
US 545(150)	35.92	34.89	7.991E-04	.0698	9.884E-04	.0863	1.121E-03	.0979	2.480E-03
NOS 7245(150)	35.92	34.89	7.991E-04	.0698	9.884E-04	.0863	1.121E-03	.0979	2.480E-03
TOP 5746(150)	37.02	35.99	7.868E-04	.0683	9.732E-04	.0844	1.104E-03	.0957	2.497E-03
US 546(150)	37.02	35.99	7.868E-04	.0683	9.732E-04	.0844	1.104E-03	.0957	2.497E-03
NOS 7246(150)	37.02	35.99	7.868E-04	.0683	9.732E-04	.0844	1.104E-03	.0957	2.497E-03


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3/29/74

NASA-RI OHSO — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
13	1	7.90	104.7	1252	20.03	9.97	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
92.9	.012	.508	3731	1.051E-05	7.479E-08	5.243E 05	1.151E-02	3.705E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	81	.0486	0	0
OP SIDE(OS)	8410	113	81	.0486	0	0
BOTTOM(BOT)	7E98	113	81	.0486	0	0
TOP(TOP)	7539	113	81	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TO 5750(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 550(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 2804(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7250(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 5751(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 551(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 2805(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7251(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 5752(113)	2.18	1.17	1.861E-03	.1617	2.276E-03	.1977	2.561E-03	.2226	5.944E-03
OS 552(113)	2.18	1.17	1.861E-03	.1617	2.276E-03	.1977	2.561E-03	.2226	5.944E-03
NOT 2806(113)	2.18	1.17	1.861E-03	.1617	2.276E-03	.1977	2.561E-03	.2226	5.944E-03
NOS 7252(113)	2.18	1.17	1.861E-03	.1617	2.276E-03	.1977	2.561E-03	.2226	5.944E-03
TOP 5753(113)	3.28	2.27	1.334E-03	.1160	1.632E-03	.1418	1.837E-03	.1596	4.262E-03
OS 553(113)	3.28	2.27	1.334E-03	.1160	1.632E-03	.1418	1.837E-03	.1596	4.262E-03
NOT 2807(113)	3.28	2.27	1.334E-03	.1160	1.632E-03	.1418	1.837E-03	.1596	4.262E-03
NOS 7253(113)	3.28	2.27	1.334E-03	.1160	1.632E-03	.1418	1.837E-03	.1596	4.262E-03
NOT 2808(113)	4.36	3.34	1.099E-03	.0954	1.344E-03	.1167	1.513E-03	.1314	3.506E-03
TOP 5754(113)	4.38	3.37	1.095E-03	.0951	1.339E-03	.1163	1.507E-03	.1309	3.497E-03
OS 554(113)	4.38	3.37	1.095E-03	.0951	1.339E-03	.1163	1.507E-03	.1309	3.497E-03
NOS 7254(113)	4.38	3.37	1.095E-03	.0951	1.339E-03	.1163	1.507E-03	.1309	3.497E-03
TOP 5755(113)	5.46	4.44	9.530E-04	.0827	1.165E-03	.1012	1.312E-03	.1139	3.038E-03
OS 555(113)	5.46	4.44	9.530E-04	.0827	1.165E-03	.1012	1.312E-03	.1139	3.038E-03
NOT 2809(113)	5.46	4.44	9.530E-04	.0827	1.165E-03	.1012	1.312E-03	.1139	3.038E-03
NOS 7255(113)	5.46	4.44	9.530E-04	.0827	1.165E-03	.1012	1.312E-03	.1139	3.038E-03
TOP 5756(113)	6.56	5.55	8.532E-04	.0741	1.043E-03	.0906	1.174E-03	.1019	2.720E-03
OS 556(113)	6.56	5.55	8.532E-04	.0741	1.043E-03	.0906	1.174E-03	.1019	2.720E-03
NOT 2810(113)	6.56	5.55	8.532E-04	.0741	1.043E-03	.0906	1.174E-03	.1019	2.720E-03
NOS 7256(113)	6.56	5.55	8.532E-04	.0741	1.043E-03	.0906	1.174E-03	.1019	2.720E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
13	1	7.90	104.9	1252	20.03	9.97	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.9	.012	.509	3731	1.053E-05	7.479E-08	5.253E 05	1.152E-02	3.701E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	81	.0486	4.498E-02	4.1342E-02
UP SIDE(US)	8410	113	81	.0486	4.498E-02	4.1342E-02
HOTTOM(BOT)	7698	113	81	.0486	4.498E-02	4.1342E-02
TOP(TOP)	7539	113	81	.0486	4.498E-02	4.1342E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
US 557(113)	7.63	6.62	7.808E-04	.0678	9.548E-04	.0829	1.075E-03	.0933	2.491E-03
HOT 2811(113)	7.63	6.62	7.808E-04	.0678	9.548E-04	.0829	1.075E-03	.0933	2.491E-03
NOS 7257(113)	7.63	6.62	7.808E-04	.0678	9.548E-04	.0829	1.075E-03	.0933	2.491E-03
TOP 5757(113)	7.66	6.65	7.793E-04	.0677	9.530E-04	.0827	1.073E-03	.0931	2.484E-03
TOP 5758(113)	8.74	7.72	7.230E-04	.0628	8.841E-04	.0767	9.952E-04	.0864	2.305E-03
US 558(113)	8.74	7.72	7.230E-04	.0628	8.841E-04	.0767	9.952E-04	.0864	2.305E-03
HOT 2812(113)	8.74	7.72	7.230E-04	.0628	8.841E-04	.0767	9.952E-04	.0864	2.305E-03
NOS 7258(113)	8.74	7.72	7.230E-04	.0628	8.841E-04	.0767	9.952E-04	.0864	2.305E-03
TOP 5759(113)	9.84	8.82	6.764E-04	.0587	8.271E-04	.0718	9.310E-04	.0808	2.156E-03
US 559(113)	9.84	8.82	6.764E-04	.0587	8.271E-04	.0718	9.310E-04	.0808	2.156E-03
HOT 2813(113)	9.84	8.82	6.764E-04	.0587	8.271E-04	.0718	9.310E-04	.0808	2.156E-03
NOS 7259(113)	9.84	8.82	6.764E-04	.0587	8.271E-04	.0718	9.310E-04	.0808	2.156E-03
TOP 5760(113)	10.91	9.90	6.385E-04	.0554	7.808E-04	.0678	8.789E-04	.0763	2.034E-03
US 560(113)	10.91	9.90	6.385E-04	.0554	7.808E-04	.0678	8.789E-04	.0763	2.034E-03
HOT 2814(113)	10.91	9.90	6.385E-04	.0554	7.808E-04	.0678	8.789E-04	.0763	2.034E-03
NOS 7260(113)	10.91	9.90	6.385E-04	.0554	7.808E-04	.0678	8.789E-04	.0763	2.034E-03
TOP 5761(113)	12.01	11.00	6.057E-04	.0526	7.407E-04	.0643	8.338E-04	.0723	1.929E-03
US 561(113)	12.01	11.00	6.057E-04	.0526	7.407E-04	.0643	8.338E-04	.0723	1.929E-03
HOT 2815(113)	12.01	11.00	6.057E-04	.0526	7.407E-04	.0643	8.338E-04	.0723	1.929E-03
NOS 7261(113)	12.01	11.00	6.057E-04	.0526	7.407E-04	.0643	8.338E-04	.0723	1.929E-03
HOT 2816(113)	13.09	12.08	5.781E-04	.0501	7.070E-04	.0613	7.958E-04	.0690	1.839E-03
TOP 5762(113)	13.12	12.10	5.775E-04	.0501	7.062E-04	.0613	7.949E-04	.0690	1.839E-03
US 562(113)	13.12	12.10	5.775E-04	.0501	7.062E-04	.0613	7.949E-04	.0690	1.839E-03
NOS 7262(113)	13.12	12.10	5.775E-04	.0501	7.062E-04	.0613	7.949E-04	.0690	1.839E-03
TOP 5763(113)	14.19	13.18	5.534E-04	.0480	6.768E-04	.0587	7.618E-04	.0661	1.761E-03
US 563(113)	14.19	13.18	5.534E-04	.0480	6.768E-04	.0587	7.618E-04	.0661	1.761E-03
HOT 2817(113)	14.19	13.18	5.534E-04	.0480	6.768E-04	.0587	7.618E-04	.0661	1.761E-03
NOS 7263(113)	14.19	13.18	5.534E-04	.0480	6.768E-04	.0587	7.618E-04	.0661	1.761E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
13	1	7.90	105.1	1252	20.03	9.97	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.9	.012	.510	3731	1.055E-05	7.479E-08	5.263E 05	1.153E-02	3.698E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCZK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	81	.0486	4.498E-02	4.1342E-02
UP SIDE(OS)	8410	113	81	.0486	4.498E-02	4.1342E-02
BOTTOM(BOT)	7698	113	81	.0486	4.498E-02	4.1342E-02
TOP(TOP)	7539	113	81	.0486	4.498E-02	4.1342E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5764(113)	15.29	14.28	5.317E-04	.0461	6.502E-04	.0564	7.318E-04	.0634	1.690E-03
OS 564(113)	15.29	14.28	5.317E-04	.0461	6.502E-04	.0564	7.318E-04	.0634	1.690E-03
HOT 2818(113)	15.29	14.28	5.317E-04	.0461	6.502E-04	.0564	7.318E-04	.0634	1.690E-03
NOS 7264(113)	15.29	14.28	5.317E-04	.0461	6.502E-04	.0564	7.318E-04	.0634	1.690E-03
TOP 5765(113)	16.37	15.36	5.127E-04	.0445	6.270E-04	.0544	7.057E-04	.0612	1.633E-03
OS 565(113)	16.37	15.36	5.127E-04	.0445	6.270E-04	.0544	7.057E-04	.0612	1.633E-03
HOT 2819(113)	16.39	15.38	5.123E-04	.0444	6.264E-04	.0543	7.052E-04	.0611	1.628E-03
NOS 7265(113)	16.39	15.38	5.123E-04	.0444	6.264E-04	.0543	7.052E-04	.0611	1.628E-03
TOP 5766(113)	17.47	16.46	4.953E-04	.0430	6.056E-04	.0525	6.817E-04	.0591	1.576E-03
OS 566(113)	17.47	16.46	4.953E-04	.0430	6.056E-04	.0525	6.817E-04	.0591	1.576E-03
HOT 2820(113)	17.47	16.46	4.953E-04	.0430	6.056E-04	.0525	6.817E-04	.0591	1.576E-03
NOS 7266(113)	17.47	16.46	4.953E-04	.0430	6.056E-04	.0525	6.817E-04	.0591	1.576E-03
TOP 5767(113)	18.57	17.56	4.795E-04	.0416	5.863E-04	.0508	6.600E-04	.0572	1.524E-03
OS 567(113)	18.57	17.56	4.795E-04	.0416	5.863E-04	.0508	6.600E-04	.0572	1.524E-03
HOT 2821(113)	18.57	17.56	4.795E-04	.0416	5.863E-04	.0508	6.600E-04	.0572	1.524E-03
NOS 7267(113)	18.57	17.56	4.795E-04	.0416	5.863E-04	.0508	6.600E-04	.0572	1.524E-03
HOT 2822(113)	19.65	18.64	4.654E-04	.0403	5.691E-04	.0493	6.406E-04	.0555	1.478E-03
TOP 5768(113)	19.67	18.66	4.651E-04	.0403	5.688E-04	.0493	6.402E-04	.0555	1.477E-03
OS 568(113)	19.67	18.66	4.651E-04	.0403	5.688E-04	.0493	6.402E-04	.0555	1.477E-03
NOS 7268(113)	19.67	18.66	4.651E-04	.0403	5.688E-04	.0493	6.402E-04	.0555	1.477E-03
TOP 5769(113)	20.75	19.74	4.523E-04	.0392	5.530E-04	.0479	6.225E-04	.0539	1.436E-03
OS 569(113)	20.75	19.74	4.523E-04	.0392	5.530E-04	.0479	6.225E-04	.0539	1.436E-03
HOT 2823(113)	20.75	19.74	4.523E-04	.0392	5.530E-04	.0479	6.225E-04	.0539	1.436E-03
NOS 7269(113)	20.75	19.74	4.523E-04	.0392	5.530E-04	.0479	6.225E-04	.0539	1.436E-03
TOP 5770(113)	21.85	20.84	4.401E-04	.0381	5.382E-04	.0466	6.058E-04	.0525	1.398E-03
OS 570(113)	21.85	20.84	4.401E-04	.0381	5.382E-04	.0466	6.058E-04	.0525	1.398E-03
HOT 2824(113)	21.85	20.84	4.401E-04	.0381	5.382E-04	.0466	6.058E-04	.0525	1.398E-03
NOS 7270(113)	21.85	20.84	4.401E-04	.0381	5.382E-04	.0466	6.058E-04	.0525	1.398E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
13	1	7.90	105.3	1252	20.03	9.97	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.9	.012	.511	3731	1.057E-05	7.479E-08	5.274E 05	1.154E-02	3.694E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	81	.0486	4.498E-02	4.1342E-02
UP SIDE(OS)	8410	113	81	.0486	4.498E-02	4.1342E-02
BOTTOM(BOT)	7698	113	81	.0486	4.498E-02	4.1342E-02
TOP(TOP)	7539	113	81	.0486	4.498E-02	4.1342E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
BOT 2825(113)	22.93	21.91	4.292E-04	.0372	5.248E-04	.0454	5.908E-04	.0511	1.360E-03
TOP 5771(113)	22.95	21.94	4.290E-04	.0372	5.245E-04	.0454	5.904E-04	.0512	1.362E-03
OS 571(113)	22.95	21.94	4.290E-04	.0372	5.245E-04	.0454	5.904E-04	.0512	1.362E-03
NOS 7271(113)	22.95	21.94	4.290E-04	.0372	5.245E-04	.0454	5.904E-04	.0512	1.362E-03
TOP 5772(113)	24.03	23.02	4.188E-04	.0363	5.121E-04	.0443	5.765E-04	.0499	1.328E-03
OS 572(113)	24.03	23.02	4.188E-04	.0363	5.121E-04	.0443	5.765E-04	.0499	1.328E-03
BOT 2826(113)	24.03	23.02	4.188E-04	.0363	5.121E-04	.0443	5.765E-04	.0499	1.328E-03
NOS 7272(113)	24.03	23.02	4.188E-04	.0363	5.121E-04	.0443	5.765E-04	.0499	1.328E-03
TOP 5773(113)	25.13	24.12	4.091E-04	.0354	5.003E-04	.0433	5.632E-04	.0487	1.297E-03
OS 573(113)	25.13	24.12	4.091E-04	.0354	5.003E-04	.0433	5.632E-04	.0487	1.297E-03
BOT 2827(113)	25.13	24.12	4.091E-04	.0354	5.003E-04	.0433	5.632E-04	.0487	1.297E-03
NOS 7273(113)	25.13	24.12	4.091E-04	.0354	5.003E-04	.0433	5.632E-04	.0487	1.297E-03
BOT 2828(113)	26.21	25.19	4.003E-04	.0346	4.895E-04	.0424	5.510E-04	.0477	1.269E-03
TOP 5774(113)	26.23	25.22	4.001E-04	.0346	4.893E-04	.0423	5.507E-04	.0477	1.268E-03
OS 574(113)	26.23	25.22	4.001E-04	.0346	4.893E-04	.0423	5.507E-04	.0477	1.268E-03
NOS 7274(113)	26.23	25.22	4.001E-04	.0346	4.893E-04	.0423	5.507E-04	.0477	1.268E-03
TOP 5775(113)	27.31	26.29	3.918E-04	.0339	4.791E-04	.0415	5.393E-04	.0467	1.242E-03
OS 575(113)	27.31	26.29	3.918E-04	.0339	4.791E-04	.0415	5.393E-04	.0467	1.242E-03
BOT 2829(113)	27.31	26.29	3.918E-04	.0339	4.791E-04	.0415	5.393E-04	.0467	1.242E-03
NOS 7275(113)	27.31	26.29	3.918E-04	.0339	4.791E-04	.0415	5.393E-04	.0467	1.242E-03
TOP 5776(113)	28.41	27.40	3.839E-04	.0332	4.694E-04	.0406	5.284E-04	.0457	1.216E-03
OS 576(113)	28.41	27.40	3.839E-04	.0332	4.694E-04	.0406	5.284E-04	.0457	1.216E-03
BOT 2830(113)	28.41	27.40	3.839E-04	.0332	4.694E-04	.0406	5.284E-04	.0457	1.216E-03
NOS 7276(113)	28.41	27.40	3.839E-04	.0332	4.694E-04	.0406	5.284E-04	.0457	1.216E-03
BOT 2831(113)	29.48	28.47	3.765E-04	.0326	4.605E-04	.0399	5.183E-04	.0449	1.194E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
13	1	7.90	105.5	1253	20.03	9.97	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/F12)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.9	.012	.512	3731	1.059E-05	7.480E-08	5.283E 05	1.155E-02	3.691E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	81	.0486	4.498E-02	4.1342E-02
OP SIDE(OS)	8410	113	81	.0486	4.498E-02	4.1342E-02
BOTTOM(BOT)	7898	113	81	.0486	4.498E-02	4.1342E-02
TOP(TOP)	7539	113	81	.0486	4.498E-02	4.1342E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5777(113)	29.51	28.50	3.764E-04	.0326	4.602E-04	.0398	5.181E-04	.0448	1.192E-03
OS 577(113)	29.51	28.50	3.764E-04	.0326	4.602E-04	.0398	5.181E-04	.0448	1.192E-03
NOS 7277(113)	29.51	28.50	3.764E-04	.0326	4.602E-04	.0398	5.181E-04	.0448	1.192E-03
TOP 5778(113)	30.59	29.57	3.695E-04	.0320	4.518E-04	.0391	5.086E-04	.0440	1.171E-03
OS 578(113)	30.59	29.57	3.695E-04	.0320	4.516E-04	.0391	5.086E-04	.0440	1.171E-03
BOT 2832(113)	30.59	29.57	3.695E-04	.0320	4.518E-04	.0391	5.086E-04	.0440	1.171E-03
NOS 7278(113)	30.59	29.57	3.695E-04	.0320	4.518E-04	.0391	5.086E-04	.0440	1.171E-03
TOP 5779(113)	31.69	30.67	3.628E-04	.0314	4.436E-04	.0384	4.993E-04	.0432	1.149E-03
OS 579(113)	31.69	30.67	3.628E-04	.0314	4.436E-04	.0384	4.993E-04	.0432	1.149E-03
BOT 2833(113)	31.69	30.67	3.628E-04	.0314	4.436E-04	.0384	4.993E-04	.0432	1.149E-03
NOS 7279(113)	31.69	30.67	3.628E-04	.0314	4.436E-04	.0384	4.993E-04	.0432	1.149E-03
TOP 5780(113)	32.76	31.75	3.566E-04	.0308	4.360E-04	.0377	4.908E-04	.0424	1.128E-03
OS 580(113)	32.76	31.75	3.566E-04	.0308	4.360E-04	.0377	4.908E-04	.0424	1.128E-03
BOT 2834(113)	32.76	31.75	3.566E-04	.0308	4.360E-04	.0377	4.908E-04	.0424	1.128E-03
NOS 7280(113)	32.76	31.75	3.566E-04	.0308	4.360E-04	.0377	4.908E-04	.0424	1.128E-03
TOP 5781(113)	33.86	32.85	3.505E-04	.0303	4.287E-04	.0371	4.825E-04	.0417	1.109E-03
OS 581(113)	33.86	32.85	3.505E-04	.0303	4.287E-04	.0371	4.825E-04	.0417	1.109E-03
BOT 2835(113)	33.86	32.85	3.505E-04	.0303	4.287E-04	.0371	4.825E-04	.0417	1.109E-03
NOS 7281(113)	33.86	32.85	3.505E-04	.0303	4.287E-04	.0371	4.825E-04	.0417	1.109E-03
BOT 2836(113)	34.94	33.93	3.449E-04	.0298	4.218E-04	.0365	4.748E-04	.0411	1.091E-03
TOP 5782(113)	34.97	33.95	3.448E-04	.0298	4.216E-04	.0365	4.746E-04	.0410	1.091E-03
OS 582(113)	34.97	33.95	3.448E-04	.0298	4.216E-04	.0365	4.746E-04	.0410	1.091E-03
NOS 7282(113)	34.97	33.95	3.448E-04	.0298	4.216E-04	.0365	4.746E-04	.0410	1.091E-03
TOP 5783(113)	36.04	35.03	3.395E-04	.0293	4.151E-04	.0359	4.673E-04	.0404	1.073E-03
OS 583(113)	36.04	35.03	3.395E-04	.0293	4.151E-04	.0359	4.673E-04	.0404	1.073E-03
BOT 2837(113)	36.04	35.03	3.395E-04	.0293	4.151E-04	.0359	4.673E-04	.0404	1.073E-03
NOS 7283(113)	36.04	35.03	3.395E-04	.0293	4.151E-04	.0359	4.673E-04	.0404	1.073E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

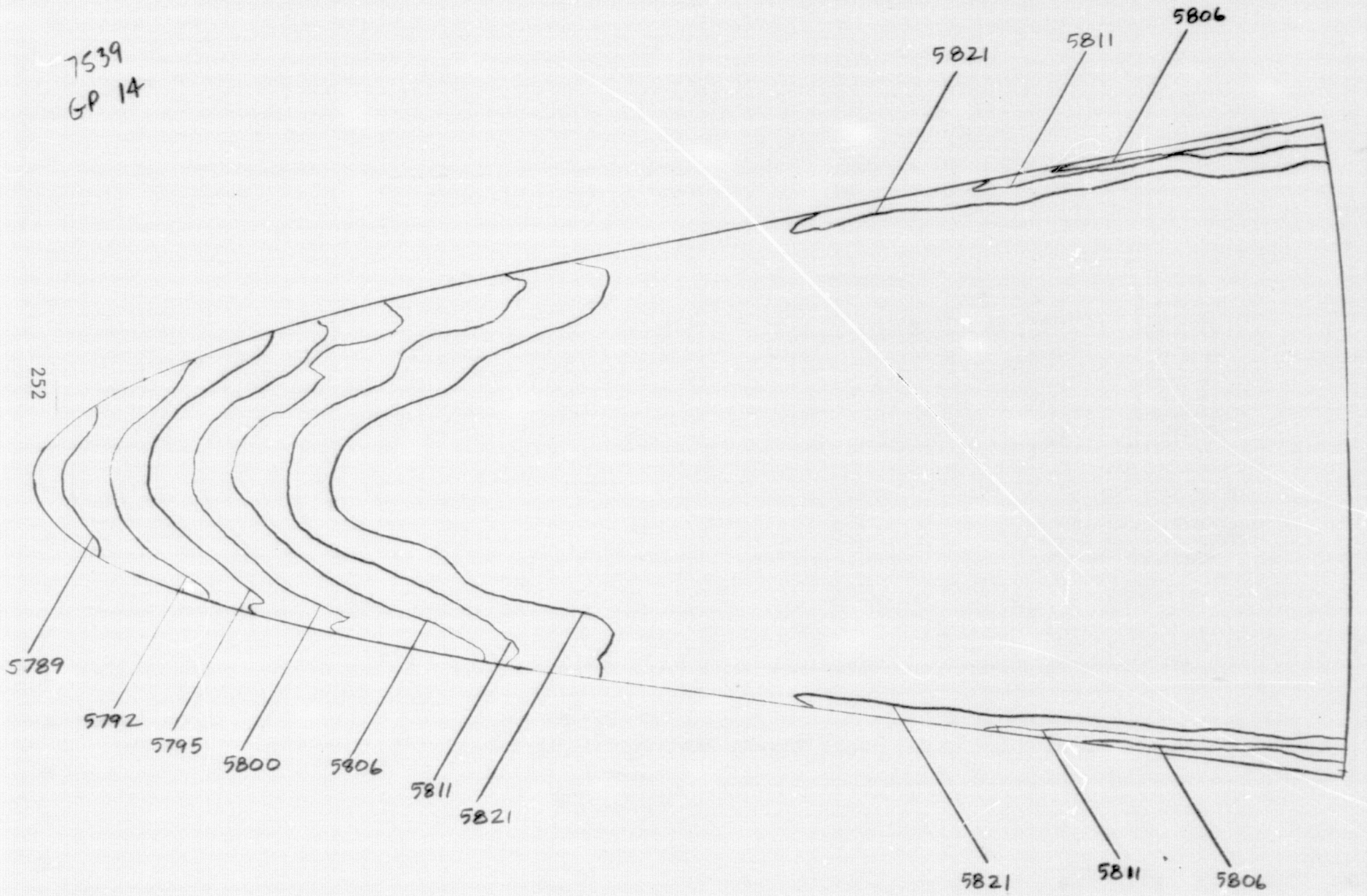
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
13	1	7.90	105.8	1253	20.03	9.97	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.9	.r12	.514	3732	1.062E-05	7.482E-08	5.296E 05	1.157E-02	3.686E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	113	81	.0486	4.498E-02	4.1342E-02
UP SIDE(US)	8410	113	81	.0486	4.498E-02	4.1342E-02
HOTTOM(BOT)	7698	113	81	.0486	4.498E-02	4.1342E-02
TOP(TOP)	7539	113	81	.0486	4.498E-02	4.1342E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5784(113)	37.14	36.13	3.343E-04	.0289	4.087E-04	.0353	4.601E-04	.0397	1.056E-03
US 584(113)	37.14	36.13	3.343E-04	.0289	4.087E-04	.0353	4.601E-04	.0397	1.056E-03
HOT 2838(113)	37.14	36.13	3.343E-04	.0289	4.087E-04	.0353	4.601E-04	.0397	1.056E-03
NOS 7284(113)	37.14	36.13	3.343E-04	.0289	4.087E-04	.0353	4.601E-04	.0397	1.056E-03
	38.02		MODEL HAS LEFT CENTERLINE						
US 585(113)	38.22	37.21	3.294E-04	.0285	4.028E-04	.0348	4.534E-04	.0392	1.041E-03
HOT 2839(113)	38.22	37.21	3.294E-04	.0285	4.028E-04	.0348	4.534E-04	.0392	1.041E-03
TOP 5785(113)	38.24	37.23	3.293E-04	.0284	4.027E-04	.0348	4.532E-04	.0392	1.040E-03
NOS 7285(113)	38.24	37.23	3.293E-04	.0284	4.027E-04	.0348	4.532E-04	.0392	1.040E-03

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
14	1	7.90	104.2	1256	20.03	9.97	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.1	.012	.516	3734	1.043E-05	7.496E-08	5.198E 05	1.149E-02	3.719E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	0	0
OP SIDE(OS)	8410	150	81	.0505	0	0
BOTTOM(BOT)	7698	150	81	.0505	0	0
TOP(TOP)	7539	150	81	.0505	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	SI(TO)
TO 5786(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 586(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 2840(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7286(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 2841(150)	1.08		MODEL HAS NOT REACHED CENTERLINE						
TO 5787(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 587(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7287(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 5788(150)	2.18	1.17	4.334E-03	.3772	5.357E-03	.4661	6.071E-03	.5283	1.388E-02
OS 588(150)	2.18	1.17	4.334E-03	.3772	5.357E-03	.4661	6.071E-03	.5283	1.388E-02
HOT 2842(150)	2.18	1.17	4.334E-03	.3772	5.357E-03	.4661	6.071E-03	.5283	1.388E-02
NOS 7288(150)	2.18	1.17	4.334E-03	.3772	5.357E-03	.4661	6.071E-03	.5283	1.388E-02
TOP 5789(150)	3.25	2.24	3.125E-03	.2720	3.863E-03	.3361	4.378E-03	.3810	1.001E-02
OS 589(150)	3.25	2.24	3.125E-03	.2720	3.863E-03	.3361	4.378E-03	.3810	1.001E-02
HOT 2843(150)	3.25	2.24	3.125E-03	.2720	3.863E-03	.3361	4.378E-03	.3810	1.001E-02
NOS 7289(150)	3.25	2.24	3.125E-03	.2720	3.863E-03	.3361	4.378E-03	.3810	1.001E-02
TOP 5790(150)	4.36	3.34	2.559E-03	.2226	3.163E-03	.2751	3.585E-03	.3118	8.191E-03
OS 590(150)	4.36	3.34	2.559E-03	.2226	3.163E-03	.2751	3.585E-03	.3118	8.191E-03
HOT 2844(150)	4.36	3.34	2.559E-03	.2226	3.163E-03	.2751	3.585E-03	.3118	8.191E-03
NOS 7290(150)	4.36	3.34	2.559E-03	.2226	3.163E-03	.2751	3.585E-03	.3118	8.191E-03
HOT 2845(150)	5.43	4.42	2.226E-03	.1937	2.751E-03	.2394	3.118E-03	.2714	7.131E-03
TOP 5791(150)	5.46	4.44	2.220E-03	.1931	2.743E-03	.2386	3.109E-03	.2705	7.104E-03
OS 591(150)	5.46	4.44	2.220E-03	.1931	2.743E-03	.2386	3.109E-03	.2705	7.104E-03
NOS 7291(150)	5.46	4.44	2.220E-03	.1931	2.743E-03	.2386	3.109E-03	.2705	7.104E-03
TOP 5792(150)	6.53	5.52	1.992E-03	.1732	2.461E-03	.2141	2.790E-03	.2427	6.374E-03
OS 592(150)	6.53	5.52	1.992E-03	.1732	2.461E-03	.2141	2.790E-03	.2427	6.374E-03
HOT 2846(150)	6.53	5.52	1.992E-03	.1732	2.461E-03	.2141	2.790E-03	.2427	6.374E-03
NOS 7292(150)	6.53	5.52	1.992E-03	.1732	2.461E-03	.2141	2.790E-03	.2427	6.374E-03

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3/29/74

NASA-RI OH50

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
14	1	7.90	104.4	1256	20.03	9.97	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.)	.012	.567	373[illegible]	1.045E-05	7.498E-08	5.208E 05	1.150E-02	3.716E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.656E-02	9.2669E-02
UP SIDE(OS)	8410	150	81	.0505	9.656E-02	9.2669E-02
BOTTOM(BOT)	7698	150	81	.0505	9.656E-02	9.2669E-02
TOP(TOP)	7539	150	81	.0505	9.656E-02	9.2669E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5793(150)	7.63	6.62	1.819E-03	.1582	2.248E-03	.1955	2.547E-03	.2216	5.820E-03
OS 593(150)	7.63	6.62	1.819E-03	.1582	2.248E-03	.1955	2.547E-03	.2216	5.820E-03
HOT 2847(150)	7.63	6.62	1.819E-03	.1582	2.248E-03	.1955	2.547E-03	.2216	5.820E-03
NOS 7293(150)	7.63	6.62	1.819E-03	.1582	2.248E-03	.1955	2.547E-03	.2216	5.820E-03
TOP 5794(150)	8.71	7.70	1.687E-03	.1466	2.084E-03	.1811	2.363E-03	.2053	5.388E-03
OS 594(150)	8.71	7.70	1.687E-03	.1466	2.084E-03	.1811	2.363E-03	.2053	5.388E-03
HOT 2848(150)	8.71	7.70	1.687E-03	.1466	2.084E-03	.1811	2.363E-03	.2053	5.388E-03
NOS 7294(150)	8.71	7.70	1.687E-03	.1466	2.084E-03	.1811	2.363E-03	.2053	5.388E-03
TOP 5795(150)	9.81	8.80	1.578E-03	.1372	1.950E-03	.1695	2.210E-03	.1921	5.044E-03
OS 595(150)	9.81	8.80	1.578E-03	.1372	1.950E-03	.1695	2.210E-03	.1921	5.044E-03
HOT 2849(150)	9.81	8.80	1.578E-03	.1372	1.950E-03	.1695	2.210E-03	.1921	5.044E-03
NOS 7295(150)	9.81	8.80	1.578E-03	.1372	1.950E-03	.1695	2.210E-03	.1921	5.044E-03
TOP 5796(150)	10.89	9.88	1.489E-03	.1295	1.840E-03	.1600	2.086E-03	.1813	4.761E-03
OS 596(150)	10.91	9.90	1.487E-03	.1292	1.838E-03	.1597	2.083E-03	.1810	4.751E-03
HOT 2850(150)	10.91	9.90	1.487E-03	.1292	1.838E-03	.1597	2.083E-03	.1810	4.751E-03
NOS 7296(150)	10.91	9.90	1.487E-03	.1292	1.838E-03	.1597	2.083E-03	.1810	4.751E-03
TOP 5797(150)	11.99	10.98	1.412E-03	.1227	1.746E-03	.1517	1.979E-03	.1719	4.512E-03
OS 597(150)	11.99	10.98	1.412E-03	.1227	1.746E-03	.1517	1.979E-03	.1719	4.512E-03
HOT 2851(150)	11.99	10.98	1.412E-03	.1227	1.746E-03	.1517	1.979E-03	.1719	4.512E-03
NOS 7297(150)	11.99	10.98	1.412E-03	.1227	1.746E-03	.1517	1.979E-03	.1719	4.512E-03
TOP 5798(150)	13.09	12.08	1.347E-03	.1170	1.664E-03	.1445	1.886E-03	.1638	4.297E-03
OS 598(150)	13.09	12.08	1.347E-03	.1170	1.664E-03	.1445	1.886E-03	.1638	4.297E-03
HOT 2852(150)	13.09	12.08	1.347E-03	.1170	1.664E-03	.1445	1.886E-03	.1638	4.297E-03
NOS 7298(150)	13.09	12.08	1.347E-03	.1170	1.664E-03	.1445	1.886E-03	.1638	4.297E-03
HOT 2853(150)	14.17	13.15	1.290E-03	.1121	1.595E-03	.1385	1.807E-03	.1570	4.118E-03

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3/29/74

NASA-RI OH50

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
14	1	7.90	104.7	1256	20.03	9.97	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.1	.012	.508	3736	1.048E-05	7.499E-08	5.222E 05	1.151E-02	3.711E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.656E-02	9.2669E-02
UP SIDE(US)	8410	150	81	.0505	9.656E-02	9.2669E-02
HOTTOM(BOT)	7698	150	81	.0505	9.656E-02	9.2669E-02
TOP(TOP)	7539	150	81	.0505	9.656E-02	9.2669E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5799(150)	14.19	13.18	1.289E-03	.1120	1.593E-03	.1384	1.806E-03	.1568	4.114E-03
US 599(150)	14.19	13.18	1.289E-03	.1120	1.593E-03	.1384	1.806E-03	.1568	4.114E-03
NOS 7299(150)	14.19	13.18	1.289E-03	.1120	1.593E-03	.1384	1.806E-03	.1568	4.114E-03
TOP 5800(150)	15.27	14.26	1.239E-03	.1077	1.532E-03	.1330	1.736E-03	.1508	3.955E-03
US 600(150)	15.27	14.26	1.239E-03	.1077	1.532E-03	.1330	1.736E-03	.1508	3.955E-03
HOT 2854(150)	15.27	14.26	1.239E-03	.1077	1.532E-03	.1330	1.736E-03	.1508	3.955E-03
NOS 7300(150)	15.27	14.26	1.239E-03	.1077	1.532E-03	.1330	1.736E-03	.1508	3.955E-03
TOP 5801(150)	16.37	15.36	1.194E-03	.1037	1.476E-03	.1281	1.673E-03	.1452	3.807E-03
US 601(150)	16.37	15.36	1.194E-03	.1037	1.476E-03	.1281	1.673E-03	.1452	3.807E-03
HOT 2855(150)	16.37	15.36	1.194E-03	.1037	1.476E-03	.1281	1.673E-03	.1452	3.807E-03
NOS 7301(150)	16.37	15.36	1.194E-03	.1037	1.476E-03	.1281	1.673E-03	.1452	3.807E-03
US 602(150)	17.45	16.43	1.154E-03	.1002	1.427E-03	.1238	1.617E-03	.1403	3.677E-03
HOT 2856(150)	17.45	16.43	1.154E-03	.1002	1.427E-03	.1238	1.617E-03	.1403	3.677E-03
TOP 5802(150)	17.47	16.46	1.154E-03	.1002	1.426E-03	.1238	1.616E-03	.1403	3.681E-03
NOS 7302(150)	17.47	16.46	1.154E-03	.1002	1.426E-03	.1238	1.616E-03	.1403	3.681E-03
TOP 5803(150)	18.55	17.53	1.118E-03	.0970	1.381E-03	.1198	1.565E-03	.1358	3.560E-03
US 603(150)	18.55	17.53	1.118E-03	.0970	1.381E-03	.1198	1.565E-03	.1358	3.560E-03
HOT 2857(150)	18.55	17.53	1.118E-03	.0970	1.381E-03	.1198	1.565E-03	.1358	3.560E-03
NOS 7303(150)	18.55	17.53	1.118E-03	.0970	1.381E-03	.1198	1.565E-03	.1358	3.560E-03
TOP 5804(150)	19.65	18.64	1.084E-03	.0941	1.340E-03	.1162	1.518E-03	.1318	3.453E-03
US 604(150)	19.65	18.64	1.084E-03	.0941	1.340E-03	.1162	1.518E-03	.1318	3.453E-03
HOT 2858(150)	19.65	18.64	1.084E-03	.0941	1.340E-03	.1162	1.518E-03	.1318	3.453E-03
NOS 7304(150)	19.65	18.64	1.084E-03	.0941	1.340E-03	.1162	1.518E-03	.1318	3.453E-03
TOP 5805(150)	20.72	19.71	1.054E-03	.0915	1.303E-03	.1130	1.476E-03	.1281	3.357E-03
US 605(150)	20.72	19.71	1.054E-03	.0915	1.303E-03	.1130	1.476E-03	.1281	3.357E-03
HOT 2859(150)	20.72	19.71	1.054E-03	.0915	1.303E-03	.1130	1.476E-03	.1281	3.357E-03
NOS 7305(150)	20.72	19.71	1.054E-03	.0915	1.303E-03	.1130	1.476E-03	.1281	3.357E-03

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3/29/74

NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VAS26 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
14	1	7.90	104.9	1256	20.03	9.97	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.1	.012	.509	3736	1.050E-05	7.499E-08	5.232E 05	1.152E-02	3.707E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.656E-02	9.2669E-02
UP SIDE(US)	8410	150	81	.0505	9.656E-02	9.2669E-02
BOTTOM(BOT)	7698	150	81	.0505	9.656E-02	9.2669E-02
TOP(TOP)	7539	150	81	.0505	9.656E-02	9.2669E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5806(150)	21.83	20.81	1.026E-03	.0890	1.268E-03	.1100	1.437E-03	.1247	3.267E-03
US 606(150)	21.83	20.81	1.026E-03	.0890	1.268E-03	.1100	1.437E-03	.1247	3.267E-03
HOT 2860(150)	21.83	20.81	1.026E-03	.0890	1.268E-03	.1100	1.437E-03	.1247	3.267E-03
NOS 7306(150)	21.83	20.81	1.026E-03	.0890	1.268E-03	.1100	1.437E-03	.1247	3.267E-03
HOT 2861(150)	22.90	21.89	1.000E-03	.0868	1.236E-03	.1073	1.401E-03	.1216	3.186E-03
TOP 5807(150)	22.93	21.91	9.997E-04	.0867	1.235E-03	.1072	1.400E-03	.1215	3.184E-03
US 607(150)	22.93	21.91	9.997E-04	.0867	1.235E-03	.1072	1.400E-03	.1215	3.184E-03
NOS 7307(150)	22.93	21.91	9.997E-04	.0867	1.235E-03	.1072	1.400E-03	.1215	3.184E-03
TOP 5808(150)	24.00	22.99	9.760E-04	.0846	1.206E-03	.1046	1.367E-03	.1186	3.106E-03
US 608(150)	24.00	22.99	9.760E-04	.0846	1.206E-03	.1046	1.367E-03	.1186	3.106E-03
HOT 2862(150)	24.00	22.99	9.760E-04	.0846	1.206E-03	.1046	1.367E-03	.1186	3.106E-03
NOS 7308(150)	24.00	22.99	9.760E-04	.0846	1.206E-03	.1046	1.367E-03	.1186	3.106E-03
TOP 5809(150)	25.10	24.09	9.534E-04	.0827	1.178E-03	.1022	1.335E-03	.1158	3.034E-03
US 609(150)	25.10	24.09	9.534E-04	.0827	1.178E-03	.1022	1.335E-03	.1158	3.034E-03
HOT 2863(150)	25.10	24.09	9.534E-04	.0827	1.178E-03	.1022	1.335E-03	.1158	3.034E-03
NOS 7309(150)	25.10	24.09	9.534E-04	.0827	1.178E-03	.1022	1.335E-03	.1158	3.034E-03
TOP 5810(150)	26.18	25.17	9.328E-04	.0809	1.153E-03	.0999	1.307E-03	.1133	2.966E-03
HOT 2864(150)	26.18	25.17	9.328E-04	.0809	1.153E-03	.0999	1.307E-03	.1133	2.966E-03
US 610(150)	26.21	25.19	9.324E-04	.0809	1.152E-03	.0999	1.306E-03	.1133	2.967E-03
NOS 7310(150)	26.21	25.19	9.324E-04	.0809	1.152E-03	.0999	1.306E-03	.1133	2.967E-03
TOP 5811(150)	27.28	26.27	9.131E-04	.0791	1.128E-03	.0978	1.279E-03	.1109	2.903E-03
US 611(150)	27.28	26.27	9.131E-04	.0791	1.128E-03	.0978	1.279E-03	.1109	2.903E-03
HOT 2865(150)	27.28	26.27	9.131E-04	.0791	1.128E-03	.0978	1.279E-03	.1109	2.903E-03
NOS 7311(150)	27.28	26.27	9.131E-04	.0791	1.128E-03	.0978	1.279E-03	.1109	2.903E-03
TOP 5812(150)	28.38	27.37	8.945E-04	.0775	1.105E-03	.0958	1.253E-03	.1086	2.844E-03
US 612(150)	28.38	27.37	8.945E-04	.0775	1.105E-03	.0958	1.253E-03	.1086	2.844E-03
HOT 2866(150)	28.38	27.37	8.945E-04	.0775	1.105E-03	.0958	1.253E-03	.1086	2.844E-03
NOS 7312(150)	28.38	27.37	8.945E-04	.0775	1.105E-03	.0958	1.253E-03	.1086	2.844E-03

NASA-RI OH50
VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
14	1	7.90	105.1	1256	20.03	9.97	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.2	.012	.510	3736	1.052E-05	7.500E-08	5.242E 05	1.154E-02	3.704E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.656E-02	9.2669E-02
UP SIDE(US)	8410	150	81	.0505	9.656E-02	9.2669E-02
BOTTOM(BOT)	7698	150	81	.0505	9.656E-02	9.2669E-02
TOP(TOP)	7539	150	81	.0505	9.656E-02	9.2669E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5813(150)	29.46	28.45	8.774E-04	.0761	1.084E-03	.0940	1.229E-03	.1065	2.789E-03
US 613(150)	29.46	28.45	8.774E-04	.0761	1.084E-03	.0940	1.229E-03	.1065	2.789E-03
BOT 2867(150)	29.46	28.45	8.774E-04	.0761	1.084E-03	.0940	1.229E-03	.1065	2.789E-03
NOS 7313(150)	29.46	28.45	8.774E-04	.0761	1.084E-03	.0940	1.229E-03	.1065	2.789E-03
TOP 5814(150)	30.56	29.55	8.609E-04	.0746	1.064E-03	.0922	1.206E-03	.1045	2.737E-03
US 614(150)	30.56	29.55	8.609E-04	.0746	1.064E-03	.0922	1.206E-03	.1045	2.737E-03
BOT 2868(150)	30.56	29.55	8.609E-04	.0746	1.064E-03	.0922	1.206E-03	.1045	2.737E-03
NOS 7314(150)	30.56	29.55	8.609E-04	.0746	1.064E-03	.0922	1.206E-03	.1045	2.737E-03
BOT 2869(150)	31.64	30.62	8.456E-04	.0733	1.045E-03	.0906	1.185E-03	.1027	2.688E-03
TOP 5815(150)	31.66	30.65	8.453E-04	.0732	1.045E-03	.0905	1.184E-03	.1026	2.685E-03
US 615(150)	31.66	30.65	8.453E-04	.0732	1.045E-03	.0905	1.184E-03	.1026	2.685E-03
NOS 7315(150)	31.66	30.65	8.453E-04	.0732	1.045E-03	.0905	1.184E-03	.1026	2.685E-03
TOP 5816(150)	32.74	31.73	8.308E-04	.0720	1.027E-03	.0890	1.164E-03	.1009	2.641E-03
US 616(150)	32.74	31.73	8.308E-04	.0720	1.027E-03	.0890	1.164E-03	.1009	2.641E-03
BOT 2870(150)	32.74	31.73	8.308E-04	.0720	1.027E-03	.0890	1.164E-03	.1009	2.641E-03
NOS 7316(150)	32.74	31.73	8.309E-04	.0720	1.027E-03	.0890	1.164E-03	.1009	2.641E-03
TOP 5817(150)	33.84	32.83	8.168E-04	.0708	1.009E-03	.0875	1.144E-03	.0992	2.597E-03
US 617(150)	33.84	32.83	8.168E-04	.0708	1.009E-03	.0875	1.144E-03	.0992	2.597E-03
BOT 2871(150)	33.84	32.83	8.168E-04	.0708	1.009E-03	.0875	1.144E-03	.0992	2.597E-03
NOS 7317(150)	33.84	32.83	8.168E-04	.0708	1.009E-03	.0875	1.144E-03	.0992	2.597E-03
US 618(150)	34.92	33.90	8.037E-04	.0696	9.933E-04	.0861	1.126E-03	.0975	2.559E-03
BOT 2872(150)	34.92	33.90	8.037E-04	.0696	9.933E-04	.0861	1.126E-03	.0975	2.559E-03
NOS 7318(150)	34.92	33.90	8.037E-04	.0696	9.933E-04	.0861	1.126E-03	.0975	2.559E-03
TOP 5818(150)	34.94	33.93	8.034E-04	.0696	9.929E-04	.0861	1.125E-03	.0976	2.554E-03
TOP 5819(150)	36.02	35.00	7.910E-04	.0685	9.775E-04	.0847	1.108E-03	.0960	2.510E-03
US 619(150)	36.02	35.00	7.910E-04	.0685	9.775E-04	.0847	1.108E-03	.0960	2.510E-03
BOT 2873(150)	36.02	35.00	7.910E-04	.0685	9.775E-04	.0847	1.108E-03	.0960	2.510E-03
NOS 7319(150)	36.02	35.00	7.910E-04	.0685	9.775E-04	.0847	1.108E-03	.0960	2.510E-03

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

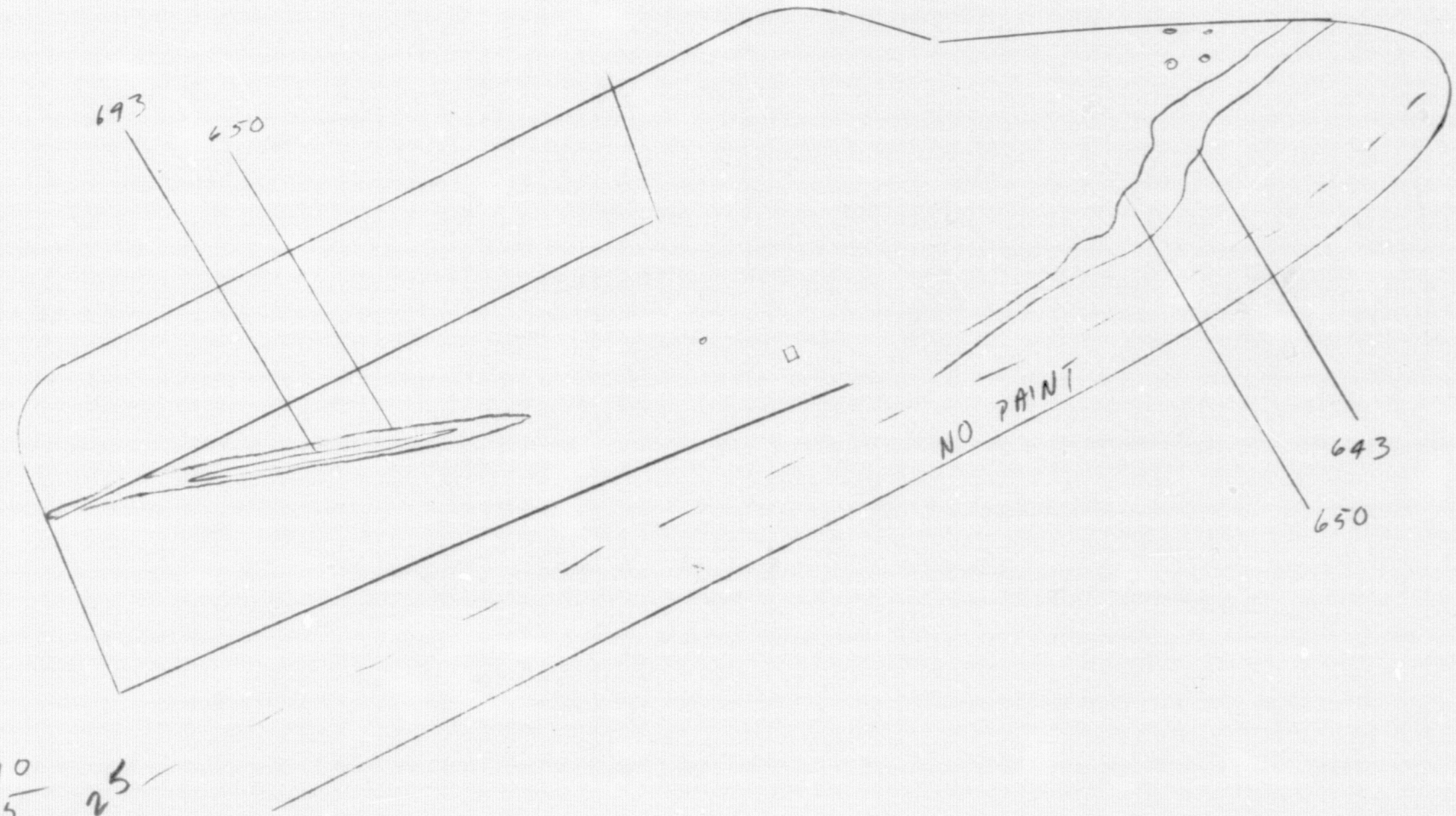
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
14	1	7.90	105.3	1256	20.03	9.97	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.2	.012	.511	3736	1.054E-05	7.501E-08	5.251E 05	1.155E-02	3.701E-02

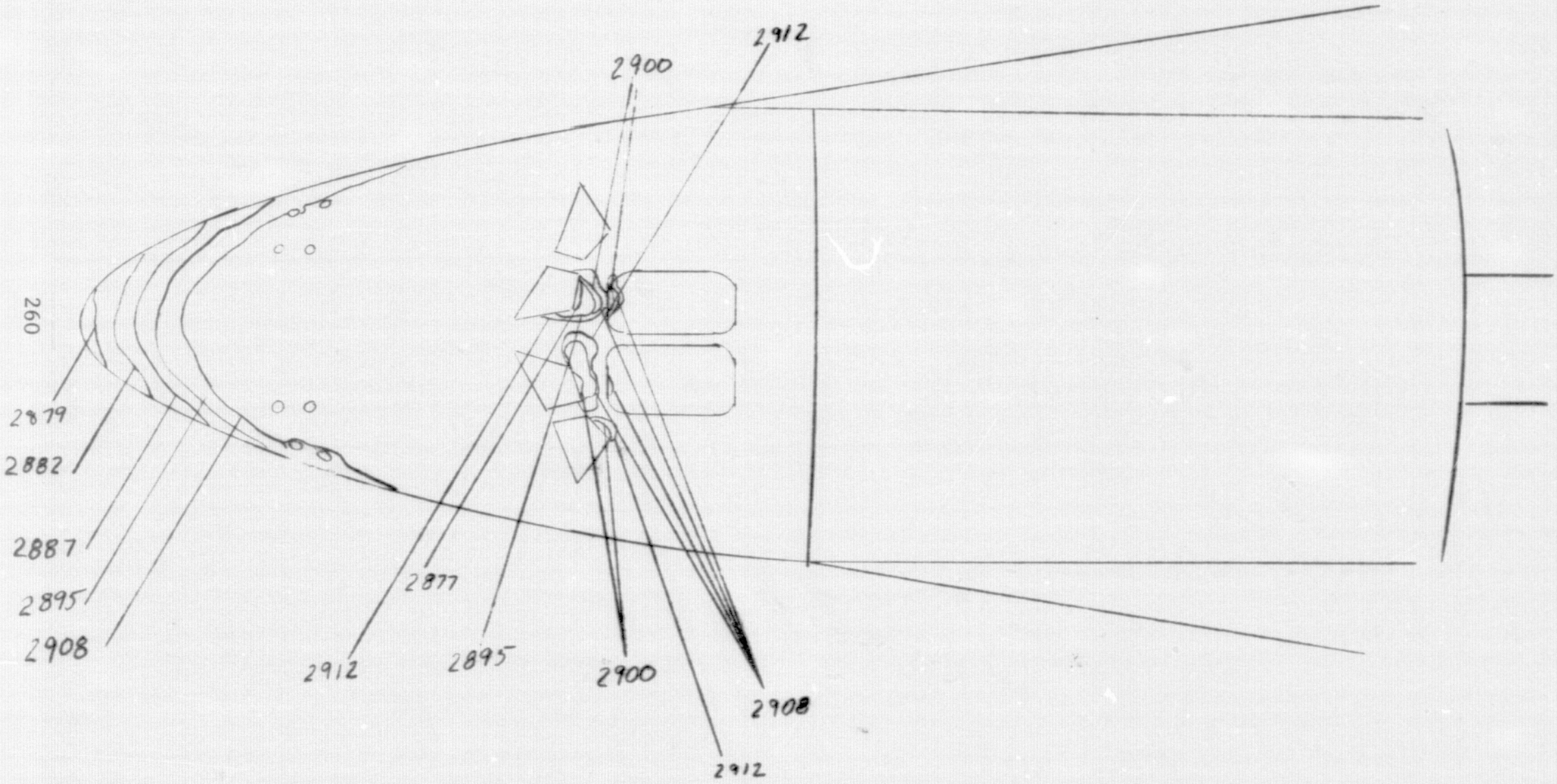
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7254	150	81	.0505	9.656E-02	9.2669E-02
OP SIDE(OS)	8410	150	81	.0505	9.656E-02	9.2669E-02
HOTTOM(BOT)	7698	150	81	.0505	9.656E-02	9.2669E-02
TOP(TOP)	7539	150	81	.0505	9.656E-02	9.2669E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5820(150)	37.12	36.11	7.788E-04	.0675	9.625E-04	.0834	1.091E-03	.0945	2.474E-03
OS 620(150)	37.12	36.11	7.788E-04	.0675	9.625E-04	.0834	1.091E-03	.0945	2.474E-03
HOT 2874(150)	37.12	36.11	7.788E-04	.0675	9.625E-04	.0834	1.091E-03	.0945	2.474E-03
NOS 7320(150)	37.12	36.11	7.788E-04	.0675	9.625E-04	.0834	1.091E-03	.0945	2.474E-03
TOP 5821(150)	38.19	37.18	7.675E-04	.0665	9.485E-04	.0822	1.075E-03	.0931	2.438E-03
OS 621(150)	38.19	37.18	7.675E-04	.0665	9.485E-04	.0822	1.075E-03	.0931	2.438E-03
HOT 2875(150)	38.19	37.18	7.675E-04	.0665	9.485E-04	.0822	1.075E-03	.0931	2.438E-03
NOS 7321(150)	38.19	37.18	7.675E-04	.0665	9.485E-04	.0822	1.075E-03	.0931	2.438E-03
TOP 5822(150)	39.30	38.28	7.563E-04	.0655	9.347E-04	.0810	1.059E-03	.0918	2.402E-03
OS 622(150)	39.30	38.28	7.563E-04	.0655	9.347E-04	.0810	1.059E-03	.0918	2.402E-03
HOT 2876(150)	39.30	38.28	7.563E-04	.0655	9.347E-04	.0810	1.059E-03	.0918	2.402E-03
NOS 7322(150)	39.30	38.28	7.563E-04	.0655	9.347E-04	.0810	1.059E-03	.0918	2.402E-03
	39.35								

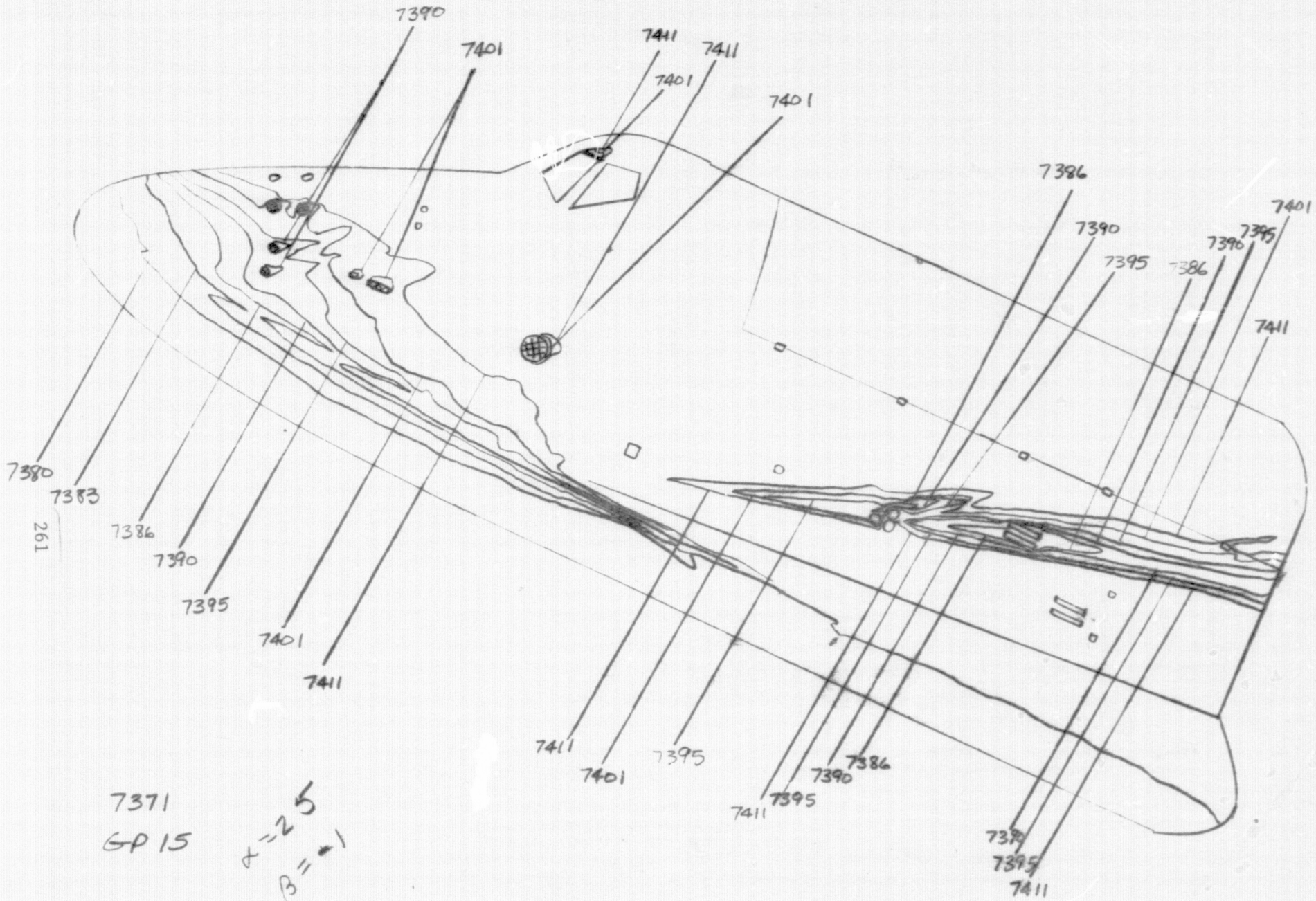
MODEL HAS LEFT CENTERLINE



8410
RP15
$\alpha = 25$
$\beta = +1$


2912
2900
260
2879
2882
2887
2895
2908
2877
2912
2895
2900
2908
2912

7898
GRP 15


7390
7401
7411
7411
7401
7401
7386
7390
7395
7386
7401
7411
7380
7383
7386
7390
7395
7401
7411
7411
7401
7395
7411
7395
7390
7386
7390
7395
7411

7371
GP 15

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
15	1	7.90	105.7	1258	25.01	4.97	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.012	.513	3740	1.056E-05	7.514E-08	5.257E 05	1.157E-02	3.698E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	81	.0486	0	0
OP SIDE(OS)	8410	113	81	.0486	0	0
BOTTOM(BOT)	7698	113	81	.0486	0	0
TOP(TOP)	7539	113	81	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TO 5823(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 623(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
BO 2877(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7377(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 5824(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 624(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 2878(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7378(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.83								
TOP 5825(113)	2.18	1.15	1.657E-03	.1605	2.269E-03	.1961	2.551E-03	.2205	5.891E-03
OS 625(113)	2.18	1.15	1.657E-03	.1605	2.269E-03	.1961	2.551E-03	.2205	5.891E-03
BOT 2879(113)	2.18	1.15	1.657E-03	.1605	2.269E-03	.1961	2.551E-03	.2205	5.891E-03
NOS 7379(113)	2.18	1.15	1.657E-03	.1605	2.269E-03	.1961	2.551E-03	.2205	5.891E-03
TOP 5826(113)	3.28	2.25	1.327E-03	.1148	1.622E-03	.1402	1.824E-03	.1577	4.212E-03
OS 626(113)	3.28	2.25	1.327E-03	.1148	1.622E-03	.1402	1.824E-03	.1577	4.212E-03
BOT 2880(113)	3.28	2.25	1.327E-03	.1148	1.622E-03	.1402	1.824E-03	.1577	4.212E-03
NOS 7380(113)	3.28	2.25	1.327E-03	.1148	1.622E-03	.1402	1.824E-03	.1577	4.212E-03
TOP 5827(113)	4.36	3.33	1.092E-03	.0944	1.334E-03	.1154	1.500E-03	.1297	3.465E-03
OS 627(113)	4.36	3.33	1.092E-03	.0944	1.334E-03	.1154	1.500E-03	.1297	3.465E-03
BOT 2881(113)	4.36	3.33	1.092E-03	.0944	1.334E-03	.1154	1.500E-03	.1297	3.465E-03
NOS 7381(113)	4.36	3.33	1.092E-03	.0944	1.334E-03	.1154	1.500E-03	.1297	3.465E-03
TOP 5828(113)	5.46	4.43	9.466E-04	.0818	1.157E-03	.1000	1.301E-03	.1124	3.004E-03
OS 628(113)	5.46	4.43	9.466E-04	.0818	1.157E-03	.1000	1.301E-03	.1124	3.004E-03
BOT 2882(113)	5.46	4.43	9.466E-04	.0818	1.157E-03	.1000	1.301E-03	.1124	3.004E-03
NOS 7382(113)	5.46	4.43	9.466E-04	.0818	1.157E-03	.1000	1.301E-03	.1124	3.004E-03
BOT 2883(113)	6.53	5.51	8.491E-04	.0734	1.038E-03	.0897	1.167E-03	.1009	2.694E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
15	1	7.90	105.6	1258	25.01	4.97	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.012	.513	3740	1.055E-05	7.515E-08	5.251E 05	1.157E-02	3.699E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	81	.0486	4.461E-02	4.0998E-02
UP SIDE(US)	8410	113	81	.0486	4.461E-02	4.0998E-02
HOTICM(BOT)	7698	113	81	.0486	4.461E-02	4.0998E-02
TOP(TOP)	7539	113	81	.0486	4.461E-02	4.0998E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5829(113)	6.56	5.53	8.472E-04	.0732	1.035E-03	.0895	1.164E-03	.1006	2.688E-03
US 629(113)	6.56	5.53	8.472E-04	.0732	1.035E-03	.0895	1.164E-03	.1006	2.688E-03
NOS 7383(113)	6.56	5.53	8.472E-04	.0732	1.035E-03	.0895	1.164E-03	.1006	2.688E-03
TOP 5830(113)	7.63	6.61	7.751E-04	.0670	9.471E-04	.0818	1.065E-03	.0920	2.457E-03
US 630(113)	7.63	6.61	7.751E-04	.0670	9.471E-04	.0818	1.065E-03	.0920	2.457E-03
HOT 2884(113)	7.63	6.61	7.751E-04	.0670	9.471E-04	.0818	1.065E-03	.0920	2.457E-03
NOS 7384(113)	7.63	6.61	7.751E-04	.0670	9.471E-04	.0818	1.065E-03	.0920	2.457E-03
TOP 5831(113)	8.74	7.71	7.176E-04	.0620	8.769E-04	.0758	9.860E-04	.0852	2.275E-03
US 631(113)	8.74	7.71	7.176E-04	.0620	8.769E-04	.0758	9.860E-04	.0852	2.275E-03
HOT 2885(113)	8.74	7.71	7.176E-04	.0620	8.769E-04	.0758	9.860E-04	.0852	2.275E-03
NOS 7385(113)	8.74	7.71	7.176E-04	.0620	8.769E-04	.0758	9.860E-04	.0852	2.275E-03
TOP 5832(113)	9.81	8.79	6.722E-04	.0581	8.214E-04	.0710	9.237E-04	.0799	2.133E-03
US 632(113)	9.81	8.79	6.722E-04	.0581	8.214E-04	.0710	9.237E-04	.0799	2.133E-03
HOT 2886(113)	9.81	8.79	6.722E-04	.0581	8.214E-04	.0710	9.237E-04	.0799	2.133E-03
NOS 7386(113)	9.81	8.79	6.722E-04	.0581	8.214E-04	.0710	9.237E-04	.0799	2.133E-03
TOP 5833(113)	10.91	9.89	6.337E-04	.0548	7.743E-04	.0669	8.707E-04	.0753	2.011E-03
US 633(113)	10.91	9.89	6.337E-04	.0548	7.743E-04	.0669	8.707E-04	.0753	2.011E-03
HOT 2887(113)	10.91	9.89	6.337E-04	.0548	7.743E-04	.0669	8.707E-04	.0753	2.011E-03
NOS 7387(113)	10.91	9.89	6.337E-04	.0548	7.743E-04	.0669	8.707E-04	.0753	2.011E-03
HOT 2888(113)	11.99	10.96	6.018E-04	.0520	7.353E-04	.0636	8.269E-04	.0715	1.910E-03
TOP 5834(113)	12.01	10.99	6.011E-04	.0520	7.345E-04	.0635	8.259E-04	.0714	1.907E-03
US 634(113)	12.01	10.99	6.011E-04	.0520	7.345E-04	.0635	8.259E-04	.0714	1.907E-03
NOS 7388(113)	12.01	10.99	6.011E-04	.0520	7.345E-04	.0635	8.259E-04	.0714	1.907E-03
TOP 5835(113)	13.09	12.06	5.737E-04	.0496	7.010E-04	.0606	7.882E-04	.0682	1.822E-03
US 635(113)	13.09	12.06	5.737E-04	.0496	7.010E-04	.0606	7.882E-04	.0682	1.822E-03
HOT 2889(113)	13.09	12.06	5.737E-04	.0496	7.010E-04	.0606	7.882E-04	.0682	1.822E-03
NOS 7389(113)	13.09	12.06	5.737E-04	.0496	7.010E-04	.0606	7.882E-04	.0682	1.822E-03

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
15	1	7.90	105.5	1258	25.01	4.97	30.00	-2.37	1.08

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.012	.512	3740	1.054E-05	7.515E-08	5.246E 05	1.156E-02	3.701E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	81	.0486	4.461E-02	4.0998E-02
UP SIDE(US)	8410	113	81	.0486	4.461E-02	4.0998E-02
BOTTOM(BOT)	7698	113	81	.0486	4.461E-02	4.0998E-02
TOP(TOP)	7539	113	81	.0486	4.461E-02	4.0998E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5836(113)	14.19	13.7	5.491E-04	.0475	6.710E-04	.0580	7.545E-04	.0652	1.742E-03
US 636(113)	14.19	13.17	5.491E-04	.0475	6.710E-04	.0580	7.545E-04	.0652	1.742E-03
BOT 2890(113)	14.19	13.17	5.491E-04	.0475	6.710E-04	.0580	7.545E-04	.0652	1.742E-03
NOS 7390(113)	14.19	13.17	5.491E-04	.0475	6.710E-04	.0580	7.545E-04	.0652	1.742E-03
BOT 2891(113)	15.27	14.24	5.280E-04	.0456	6.452E-04	.0557	7.255E-04	.0627	1.674E-03
TOP 5837(113)	15.29	14.27	5.275E-04	.0456	6.446E-04	.0557	7.248E-04	.0627	1.674E-03
US 637(113)	15.29	14.27	5.275E-04	.0456	6.446E-04	.0557	7.248E-04	.0627	1.674E-03
NOS 7391(113)	15.29	14.27	5.275E-04	.0456	6.446E-04	.0557	7.248E-04	.0627	1.674E-03
TOP 5838(113)	16.37	15.34	5.087E-04	.0440	6.216E-04	.0537	6.990E-04	.0604	1.613E-03
US 638(113)	16.37	15.34	5.087E-04	.0440	6.216E-04	.0537	6.990E-04	.0604	1.613E-03
BOT 2892(113)	16.37	15.34	5.087E-04	.0440	6.216E-04	.0537	6.990E-04	.0604	1.613E-03
NOS 7392(113)	16.37	15.34	5.087E-04	.0440	6.216E-04	.0537	6.990E-04	.0604	1.613E-03
TOP 5839(113)	17.47	16.44	4.914E-04	.0425	6.004E-04	.0519	6.751E-04	.0583	1.558E-03
US 639(113)	17.47	16.44	4.914E-04	.0425	6.004E-04	.0519	6.751E-04	.0583	1.558E-03
BOT 2893(113)	17.47	16.44	4.914E-04	.0425	6.004E-04	.0519	6.751E-04	.0583	1.558E-03
NOS 7393(113)	17.47	16.44	4.914E-04	.0425	6.004E-04	.0519	6.751E-04	.0583	1.558E-03
TOP 5840(113)	18.55	17.52	4.760E-04	.0412	5.817E-04	.0503	6.541E-04	.0566	1.512E-03
US 640(113)	18.55	17.52	4.760E-04	.0412	5.817E-04	.0503	6.541E-04	.0566	1.512E-03
BOT 2894(113)	18.55	17.52	4.760E-04	.0412	5.817E-04	.0503	6.541E-04	.0566	1.512E-03
NOS 7394(113)	18.55	17.52	4.760E-04	.0412	5.817E-04	.0503	6.541E-04	.0566	1.512E-03
TOP 5841(113)	19.65	18.62	4.617E-04	.0399	5.642E-04	.0488	6.344E-04	.0548	1.465E-03
US 641(113)	19.65	18.62	4.617E-04	.0399	5.642E-04	.0488	6.344E-04	.0548	1.465E-03
BOT 2895(113)	19.65	18.62	4.617E-04	.0399	5.642E-04	.0488	6.344E-04	.0548	1.465E-03
NOS 7395(113)	19.65	18.62	4.617E-04	.0399	5.642E-04	.0488	6.344E-04	.0548	1.465E-03
TOP 5842(113)	20.75	19.72	4.487E-04	.0388	5.482E-04	.0474	6.165E-04	.0533	1.424E-03
US 642(113)	20.75	19.72	4.487E-04	.0388	5.482E-04	.0474	6.165E-04	.0533	1.424E-03
BOT 2896(113)	20.75	19.72	4.487E-04	.0388	5.482E-04	.0474	6.165E-04	.0533	1.424E-03
NOS 7396(113)	20.75	19.72	4.487E-04	.0388	5.482E-04	.0474	6.165E-04	.0533	1.424E-03

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
15	1	7.90	105.6	1258	25.01	4.97	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.012	.513	3740	1.055E-05	7.514E-08	5.252E 05	1.157E-02	3.699E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	81	.0486	4.461E-02	4.0998E-02
OP SIDE(OS)	8410	113	81	.0486	4.461E-02	4.0998E-02
BOTTOM(BOT)	7698	113	81	.0486	4.461E-02	4.0998E-02
TOP(TOP)	7539	113	81	.0486	4.461E-02	4.0998E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5843(113)	21.83	20.80	4.369E-04	.0378	5.338E-04	.0462	6.003E-04	.0519	1.386E-03
OS 643(113)	21.83	20.80	4.369E-04	.0378	5.338E-04	.0462	6.003E-04	.0519	1.386E-03
BOT 2897(113)	21.83	20.80	4.369E-04	.0378	5.338E-04	.0462	6.003E-04	.0519	1.386E-03
NOS 7397(113)	21.83	20.80	4.369E-04	.0378	5.338E-04	.0462	6.003E-04	.0519	1.386E-03
TOP 5844(113)	22.93	21.90	4.258E-04	.0368	5.203E-04	.0450	5.850E-04	.0506	1.351E-03
OS 644(113)	22.93	21.90	4.258E-04	.0368	5.203E-04	.0450	5.850E-04	.0506	1.351E-03
BOT 2898(113)	22.93	21.90	4.258E-04	.0368	5.203E-04	.0450	5.850E-04	.0506	1.351E-03
NOS 7398(113)	22.93	21.90	4.258E-04	.0368	5.203E-04	.0450	5.850E-04	.0506	1.351E-03
BOT 2899(113)	24.00	22.98	4.157E-04	.0359	5.079E-04	.0439	5.712E-04	.0494	1.319E-03
TOP 5845(113)	24.03	23.00	4.155E-04	.0359	5.076E-04	.0439	5.708E-04	.0493	1.318E-03
OS 645(113)	24.03	23.00	4.155E-04	.0359	5.076E-04	.0439	5.708E-04	.0493	1.318E-03
NOS 7399(113)	24.03	23.00	4.155E-04	.0359	5.076E-04	.0439	5.708E-04	.0493	1.318E-03
TOP 5846(113)	25.10	24.08	4.061E-04	.0351	4.962E-04	.0429	5.579E-04	.0482	1.289E-03
OS 646(113)	25.10	24.08	4.061E-04	.0351	4.962E-04	.0429	5.579E-04	.0482	1.289E-03
BOT 2900(113)	25.10	24.08	4.061E-04	.0351	4.962E-04	.0429	5.579E-04	.0482	1.289E-03
NOS 7400(113)	25.10	24.08	4.061E-04	.0351	4.962E-04	.0429	5.579E-04	.0482	1.289E-03
TOP 5847(113)	26.21	25.18	3.971E-04	.0343	4.852E-04	.0419	5.456E-04	.0471	1.259E-03
OS 647(113)	26.21	25.18	3.971E-04	.0343	4.852E-04	.0419	5.456E-04	.0471	1.259E-03
BOT 2901(113)	26.21	25.18	3.971E-04	.0343	4.852E-04	.0419	5.456E-04	.0471	1.259E-03
NOS 7401(113)	26.21	25.18	3.971E-04	.0343	4.852E-04	.0419	5.456E-04	.0471	1.259E-03
TOP 5848(113)	27.28	26.26	3.889E-04	.0336	4.752E-04	.0411	5.343E-04	.0462	1.235E-03
OS 648(113)	27.28	26.26	3.889E-04	.0336	4.752E-04	.0411	5.343E-04	.0462	1.235E-03
BOT 2902(113)	27.28	26.26	3.889E-04	.0336	4.752E-04	.0411	5.343E-04	.0462	1.235E-03
NOS 7402(113)	27.31	26.28	3.887E-04	.0336	4.749E-04	.0410	5.341E-04	.0461	1.232E-03
TOP 5849(113)	28.38	27.36	3.810E-04	.0329	4.655E-04	.0403	5.234E-04	.0453	1.210E-03
OS 649(113)	28.38	27.36	3.810E-04	.0329	4.655E-04	.0403	5.234E-04	.0453	1.210E-03
BOT 2903(113)	28.38	27.36	3.810E-04	.0329	4.655E-04	.0403	5.234E-04	.0453	1.210E-03
NOS 7403(113)	28.38	27.36	3.810E-04	.0329	4.655E-04	.0403	5.234E-04	.0453	1.210E-03

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREREND	ROLL-MODEL	YAW
15	1	7.90	105.5	1258	25.01	4.97	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.3	.012	.512	3740	1.054E-05	7.515E-08	5.246E 05	1.156E-02	3.701E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	81	.0486	4.461E-02	4.0998E-02
UP SIDE(US)	8410	113	81	.0486	4.461E-02	4.0998E-02
BOTTOM(BOT)	7698	113	81	.0486	4.461E-02	4.0998E-02
TOP(TOP)	7539	113	81	.0486	4.461E-02	4.0998E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5850(113)	29.48	28.46	3.735E-04	.0323	4.564E-04	.0395	5.132E-04	.0444	1.186E-03
US 650(113)	29.48	28.46	3.735E-04	.0323	4.564E-04	.0395	5.132E-04	.0444	1.186E-03
HOT 2904(113)	29.48	28.46	3.735E-04	.0323	4.564E-04	.0395	5.132E-04	.0444	1.186E-03
NOS 7404(113)	29.48	28.46	3.735E-04	.0323	4.564E-04	.0395	5.132E-04	.0444	1.186E-03
TOP 5851(113)	30.56	29.53	3.666E-04	.0317	4.480E-04	.0387	5.038E-04	.0436	1.163E-03
US 651(113)	30.56	29.53	3.666E-04	.0317	4.480E-04	.0387	5.038E-04	.0436	1.163E-03
HOT 2905(113)	30.56	29.53	3.666E-04	.0317	4.480E-04	.0387	5.038E-04	.0436	1.163E-03
NOS 7405(113)	30.59	29.56	3.665E-04	.0317	4.[illegible]6E-04	.0387	5.036E-04	.0435	1.163E-03
TOP 5852(113)	31.66	30.64	3.600E-04	.0311	4.399E-04	.0380	4.946E-04	.0428	1.142E-03
US 652(113)	31.66	30.64	3.600E-04	.0311	4.399E-04	.0380	4.946E-04	.0428	1.142E-03
HOT 2906(113)	31.66	30.64	3.600E-04	.0311	4.399E-04	.0380	4.946E-04	.0428	1.142E-03
NOS 7406(113)	31.66	30.64	3.600E-04	.0311	4.399E-04	.0380	4.946E-04	.0428	1.142E-03
TOP 5853(113)	32.76	31.74	3.537E-04	.0306	4.322E-04	.0374	4.860E-04	.0420	1.122E-03
US 653(113)	32.76	31.74	3.537E-04	.0306	4.322E-04	.0374	4.860E-04	.0420	1.122E-03
HOT 2907(113)	32.76	31.74	3.537E-04	.0306	4.322E-04	.0374	4.860E-04	.0420	1.122E-03
NOS 7407(113)	32.76	31.74	3.537E-04	.0306	4.322E-04	.0374	4.860E-04	.0420	1.122E-03
TOP 5854(113)	33.84	32.81	3.478E-04	.0301	4.250E-04	.0367	4.779E-04	.0413	1.104E-03
US 654(113)	33.84	32.81	3.478E-04	.0301	4.250E-04	.0367	4.779E-04	.0413	1.104E-03
HOT 2908(113)	33.84	32.81	3.478E-04	.0301	4.250E-04	.0367	4.779E-04	.0413	1.104E-03
NOS 7408(113)	33.84	32.81	3.478E-04	.0301	4.250E-04	.0367	4.779E-04	.0413	1.104E-03
TOP 5855(113)	34.94	33.91	3.421E-04	.0296	4.181E-04	.0361	4.701E-04	.0406	1.085E-03
US 655(113)	34.94	33.91	3.421E-04	.0296	4.181E-04	.0361	4.701E-04	.0406	1.085E-03
HOT 2909(113)	34.94	33.91	3.421E-04	.0296	4.181E-04	.0361	4.701E-04	.0406	1.085E-03
NOS 7409(113)	34.94	33.91	3.421E-04	.0296	4.181E-04	.0361	4.701E-04	.0406	1.085E-03
US 656(113)	36.02	34.99	3.368E-04	.0291	4.110E-04	.0356	4.628E-04	.0400	1.070E-03
HOT 2910(113)	36.02	34.99	3.368E-04	.0291	4.110E-04	.0356	4.628E-04	.0400	1.070E-03

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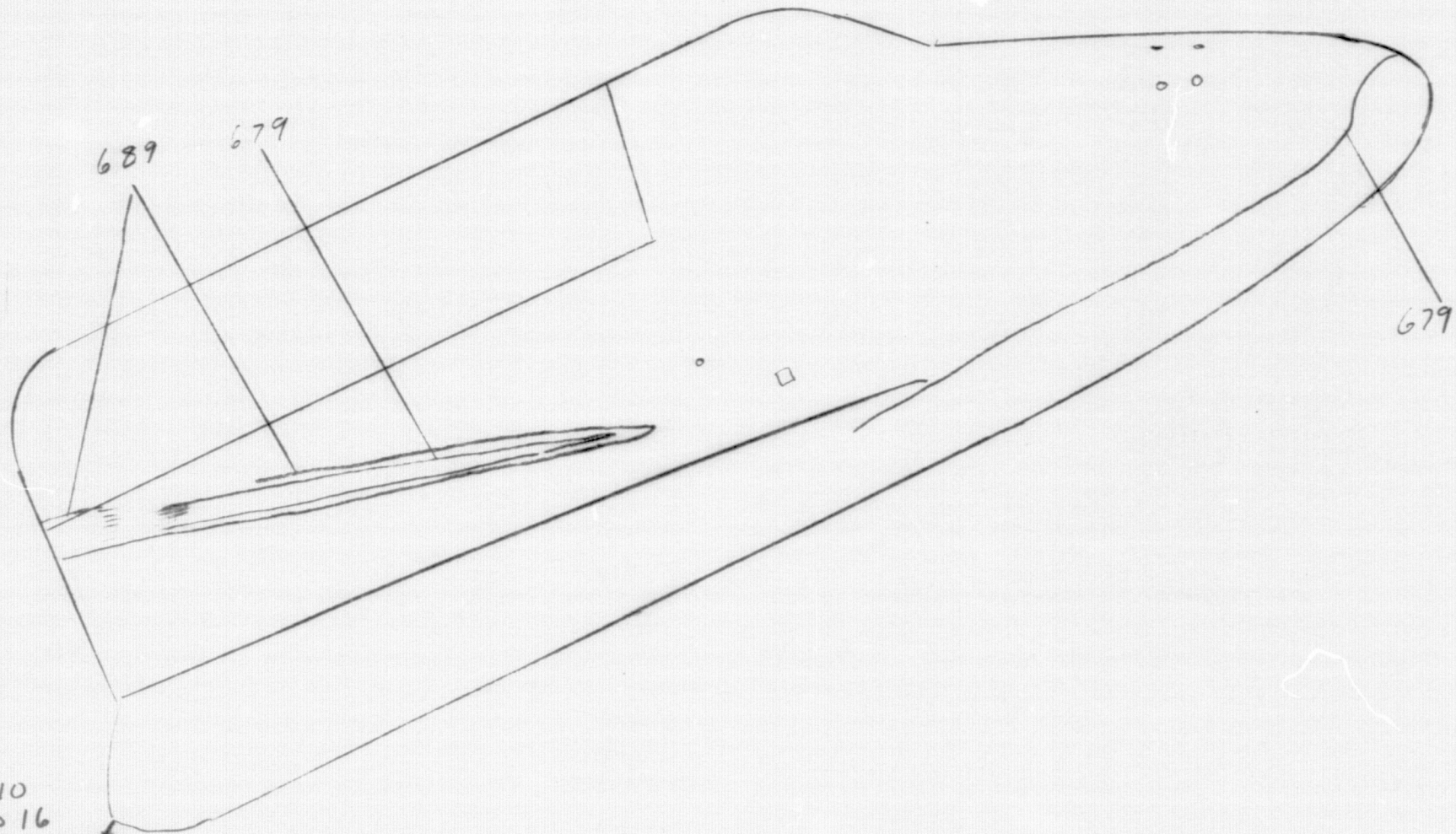
NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

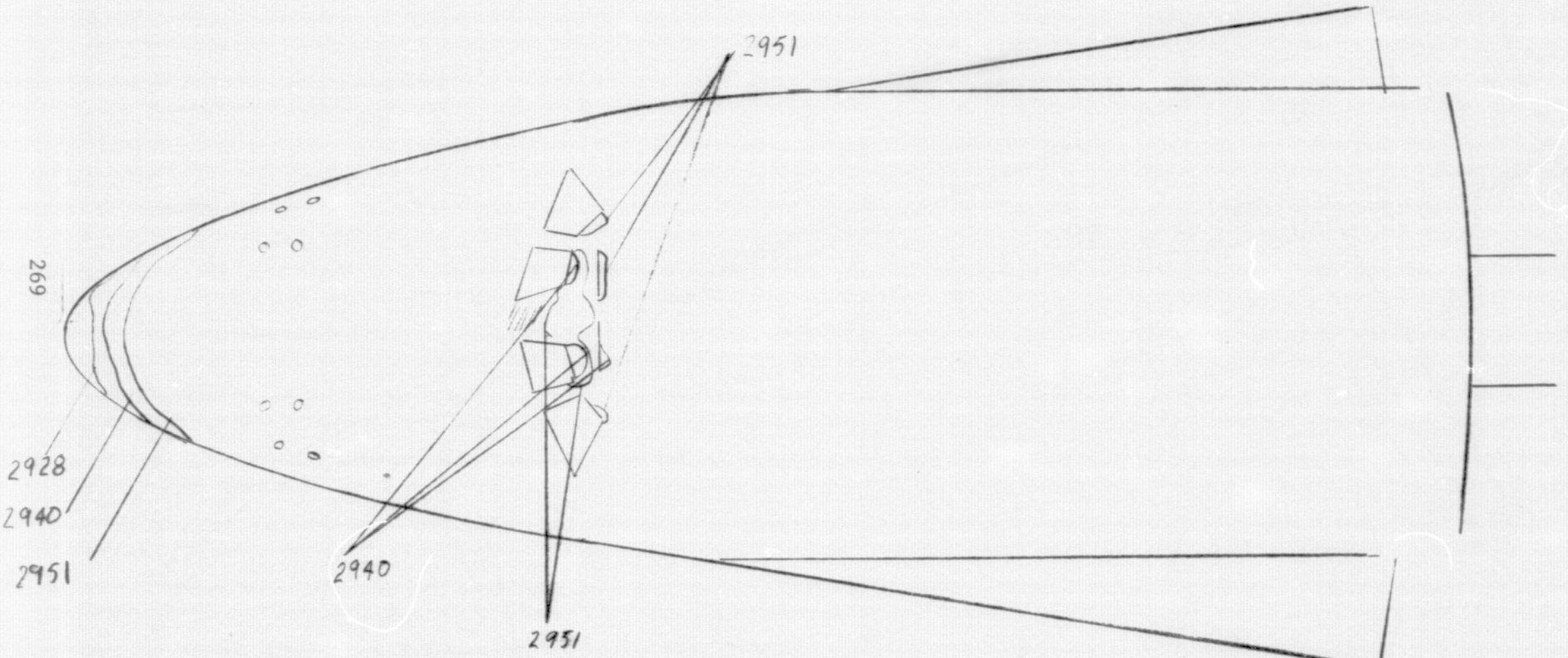
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
15	1	7.90	105.5	1258	25.01	4.97	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
93.3	.012	.512	3740	1.054E-05	7.515E-08	5.246E 05	1.156E-02	3.701E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	81	.0486	4.461E-02	4.0998E-02
UP SIDE(US)	8410	113	81	.0486	4.461E-02	4.0998E-02
BOTTOM(BOT)	7698	113	81	.0486	4.461E-02	4.0998E-02
TOP(TOP)	7539	113	81	.0486	4.461E-02	4.0998E-02

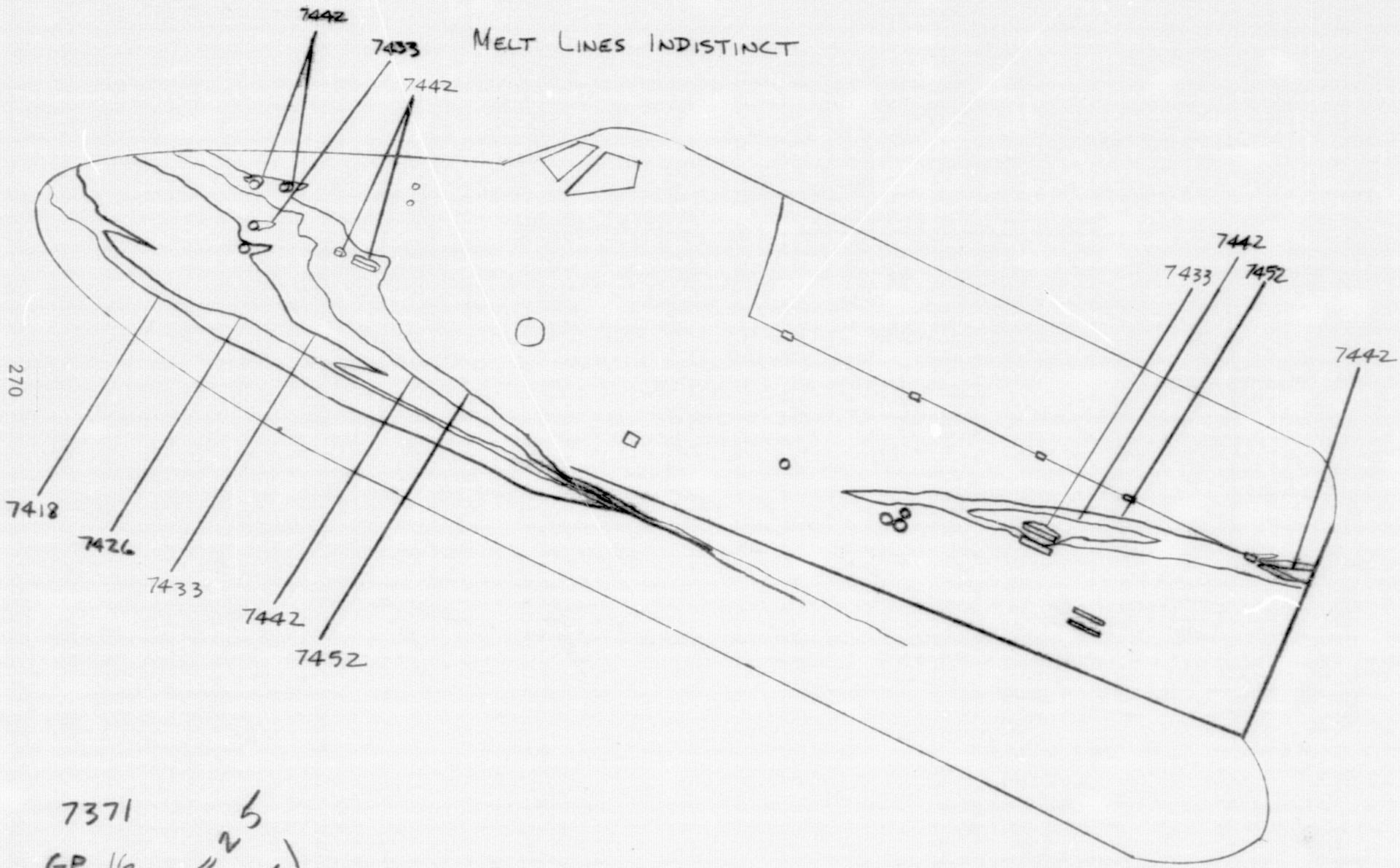
PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5856(113)	36.04	35.02	3.367E-04	.0291	4.114E-04	.0356	4.627E-04	.0400	1.067E-03
NOS 7410(113)	36.04	35.02	3.367E-04	.0291	4.114E-04	.0356	4.627E-04	.0400	1.067E-03
TOP 5857(113)	37.12	36.09	3.317E-04	.0287	4.053E-04	.0351	4.557E-04	.0394	1.053E-03
US 657(113)	37.12	36.09	3.317E-04	.0287	4.053E-04	.0351	4.557E-04	.0394	1.053E-03
HOT 2911(113)	37.12	36.09	3.317E-04	.0287	4.053E-04	.0351	4.557E-04	.0394	1.053E-03
NOS 7411(113)	37.12	36.09	3.317E-04	.0287	4.053E-04	.0351	4.557E-04	.0394	1.053E-03
US 658(113)	38.19	37.17	3.268E-04	.0283	3.994E-04	.0345	4.491E-04	.0388	1.037E-03
TOP 5858(113)	38.22	37.19	3.267E-04	.0282	3.992E-04	.0345	4.489E-04	.0388	1.037E-03
HOT 2912(113)	38.22	37.19	3.267E-04	.0282	3.992E-04	.0345	4.489E-04	.0388	1.037E-03
NOS 7412(113)	38.22	37.19	3.267E-04	.0282	3.992E-04	.0345	4.489E-04	.0388	1.037E-03
	38.59		MODEL HAS LEFT CENTERLINE						
TOP 5859(113)	39.30	38.27	3.221E-04	.0278	3.936E-04	.0340	4.426E-04	.0383	1.022E-03
US 659(113)	39.30	38.27	3.221E-04	.0278	3.936E-04	.0340	4.426E-04	.0383	1.022E-03
HOT 2913(113)	39.30	38.27	3.221E-04	.0278	3.936E-04	.0340	4.426E-04	.0383	1.022E-03
NOS 7413(113)	39.30	38.27	3.221E-04	.0278	3.936E-04	.0340	4.426E-04	.0383	1.022E-03
TOP 5860(113)	51.51	50.48	2.804E-04	.0242	3.427E-04	.0296	3.853E-04	.0333	8.899E-04
US 660(113)	51.51	50.48	2.804E-04	.0242	3.427E-04	.0296	3.853E-04	.0333	8.899E-04
HOT 2914(113)	51.51	50.48	2.804E-04	.0242	3.427E-04	.0296	3.853E-04	.0333	8.899E-04
NOS 7414(113)	51.51	50.48	2.804E-04	.0242	3.427E-04	.0296	3.853E-04	.0333	8.899E-04


689
679
679
8410
CRP 16
-25
β=+1



7898
GRP 16

DH-DA



7371

GP 16

4 = 2

8 = 1

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NASA-RI OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
16	1	7.90	104.7	1260	24.96	5.02	30.00	2.37	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.012	.5?E	3743	1.044E-05	7.527E-08	5.194E 05	1.152E-02	3.719E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	83	.0486	0	0
OP SIDE(OS)	8410	113	83	.0486	0	0
BOTTOM(BOT)	7698	113	83	.0486	0	0
TOP(TOP)	7539	113	83	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TO 5861(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 661(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
BO 2915(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7415(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 5862(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 662(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 2916(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7416(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =		1.85							
BOT 2917(113)	2.18	1.14	1.746E-03	.1512	2.134E-03	.1849	2.400E-03	.2079	5.569E-03
TOP 5863(113)	2.20	1.16	1.727E-03	.1497	2.111E-03	.1830	2.374E-03	.2058	5.514E-03
OS 663(113)	2.20	1.16	1.727E-03	.1497	2.111E-03	.1830	2.374E-03	.2058	5.514E-03
NOS 7417(113)	2.20	1.16	1.727E-03	.1497	2.111E-03	.1830	2.374E-03	.205R	5.514E-03
TOP 5864(113)	3.28	2.24	1.244E-03	.1078	1.521E-03	.1318	1.711E-03	.1482	3.970E-03
OS 664(113)	3.28	2.24	1.244E-03	.1078	1.521E-03	.1318	1.711E-03	.1482	3.970E-03
BOT 2918(113)	3.28	2.24	1.244E-03	.1078	1.521E-03	.1318	1.711E-03	.1482	3.970E-03
NOS 7418(113)	3.28	2.24	1.244E-03	.1078	1.521E-03	.1318	1.711E-03	.1482	3.970E-03
BOT 2919(113)	4.36	3.32	1.023E-03	.0885	1.250E-03	.1082	1.406E-03	.1217	3.259E-03
TOP 5865(113)	4.38	3.34	1.019E-03	.0883	1.245E-03	.1079	1.401E-03	.1213	3.250E-03
OS 665(113)	4.38	3.34	1.019E-03	.0883	1.245E-03	.1079	1.401E-03	.1213	3.250E-03
NOS 7419(113)	4.38	3.34	1.019E-03	.0883	1.245E-03	.1079	1.401E-03	.1213	3.250E-03
TOP 5866(113)	5.46	4.42	8.859E-04	.0767	1.083E-03	.0938	1.218E-03	.1055	2.824E-03
OS 666(113)	5.46	4.42	8.859E-04	.0767	1.083E-03	.0938	1.218E-03	.1055	2.824E-03
BOT 2920(113)	5.46	4.42	8.859E-04	.0767	1.083E-03	.0938	1.218E-03	.1055	2.824E-03
NOS 7420(113)	5.46	4.42	8.859E-04	.0767	1.083E-03	.0938	1.218E-03	.1055	2.824E-03
TOP 5867(113)	6.56	5.52	7.926E-04	.0686	9.690E-04	.0839	1.090E-03	.0943	2.524E-03
OS 667(113)	6.56	5.52	7.926E-04	.0686	9.690E-04	.0839	1.090E-03	.0943	2.524E-03
BOT 2921(113)	6.56	5.52	7.926E-04	.0686	9.690E-04	.0839	1.090E-03	.0943	2.524E-03
NOS 7421(113)	6.56	5.52	7.926E-04	.0686	9.690E-04	.0839	1.090E-03	.0943	2.524E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
16	1	7.90	105.3	1260	24.96	5.02	30.00	2.37	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.012	.511	3743	1.051E-05	7.526E-08	5.224E 05	1.155E-02	3.708E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7371	113	83	.0486	4.182E-02	3.8309E-02
UP SIDE(US)	8410	113	83	.0486	4.182E-02	3.8309E-02
HOTTOM(BOT)	7E98	113	83	.0486	4.182E-02	3.8309E-02
TOP(TOP)	7539	113	83	.0486	4.182E-02	3.8309E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
HOT 2922(113)	7.63	6.59	7.250E-04	.0628	8.864E-04	.0768	9.969E-04	.0864	2.313E-03
TOP 5868(113)	7.66	6.62	7.237E-04	.0626	8.847E-04	.0766	9.950E-04	.0861	2.304E-03
US 668(113)	7.66	6.62	7.237E-04	.0626	8.847E-04	.0766	9.950E-04	.0861	2.304E-03
NOS 7422(113)	7.66	6.62	7.237E-04	.0626	8.847E-04	.0766	9.950E-04	.0861	2.304E-03
TOP 5869(113)	8.74	7.70	6.712E-04	.0581	8.205E-04	.0711	9.228E-04	.0799	2.139E-03
US 669(113)	8.74	7.70	6.712E-04	.0581	8.205E-04	.0711	9.228E-04	.0799	2.139E-03
HOT 2923(113)	8.74	7.70	6.712E-04	.0581	8.205E-04	.0711	9.228E-04	.0799	2.139E-03
NOS 7423(113)	8.74	7.70	6.712E-04	.0581	8.205E-04	.0711	9.228E-04	.0799	2.139E-03
TOP 5870(113)	9.84	8.80	6.277E-04	.0543	7.675E-04	.0664	8.631E-04	.0747	1.999E-03
US 670(113)	9.84	8.80	6.277E-04	.0543	7.675E-04	.0664	8.631E-04	.0747	1.999E-03
HOT 2924(113)	9.84	8.80	6.277E-04	.0543	7.675E-04	.0664	8.631E-04	.0747	1.999E-03
NOS 7424(113)	9.84	8.80	6.277E-04	.0543	7.675E-04	.0664	8.631E-04	.0747	1.999E-03
TOP 5871(113)	10.91	9.87	5.925E-04	.0513	7.244E-04	.0627	8.147E-04	.0705	1.885E-03
US 671(113)	10.91	9.87	5.925E-04	.0513	7.244E-04	.0627	8.147E-04	.0705	1.885E-03
HOT 2925(113)	10.91	9.87	5.925E-04	.0513	7.244E-04	.0627	8.147E-04	.0705	1.885E-03
NOS 7425(113)	10.91	9.87	5.925E-04	.0513	7.244E-04	.0627	8.147E-04	.0705	1.885E-03
TOP 5872(113)	12.01	10.97	5.620E-04	.0486	6.871E-04	.0595	7.727E-04	.0669	1.790E-03
US 672(113)	12.01	10.97	5.620E-04	.0486	6.871E-04	.0595	7.727E-04	.0669	1.790E-03
HOT 2926(113)	12.01	10.97	5.620E-04	.0486	6.871E-04	.0595	7.727E-04	.0669	1.790E-03
NOS 7426(113)	12.01	10.97	5.620E-04	.0486	6.871E-04	.0595	7.727E-04	.0669	1.790E-03
TOP 5873(113)	13.09	12.05	5.363E-04	.0464	6.557E-04	.0567	7.374E-04	.0638	1.706E-03
US 673(113)	13.09	12.05	5.363E-04	.0464	6.557E-04	.0567	7.374E-04	.0638	1.706E-03
HOT 2927(113)	13.12	12.08	5.358E-04	.0464	6.550E-04	.0567	7.367E-04	.0637	1.704E-03
NOS 7427(113)	13.12	12.08	5.358E-04	.0464	6.550E-04	.0567	7.367E-04	.0637	1.704E-03
US 674(113)	14.19	13.15	5.134E-04	.0444	6.277E-04	.0543	7.059E-04	.0610	1.632E-03
HOT 2928(113)	14.19	13.15	5.134E-04	.0444	6.277E-04	.0543	7.059E-04	.0610	1.632E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
16	1	7.90	105.5	1260	24.96	5.02	30.00	2.37	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.01[illegible]	.51[illegible]	3743	1.052E-05	7.527E-08	5.234E 05	1.157E-02	3.705E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	83	.0486	4.182E-02	3.8309E-02
UP SIDE(OS)	8410	113	83	.0486	4.182E-02	3.8309E-02
BOTTOM(BOT)	7698	113	83	.0486	4.182E-02	3.8309E-02
TOP(TOP)	7539	113	83	.0486	4.182E-02	3.8309E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5874(113)	14.22	13.18	5.129E-04	.0444	6.271E-04	.0542	7.052E-04	.0610	1.632E-03
NOS 7428(113)	14.22	13.19	5.129E-04	.0444	6.271E-04	.0542	7.052E-04	.0610	1.632E-03
TOP 5875(113)	15.29	14.25	4.932E-04	.0426	6.029E-04	.0521	6.780E-04	.0586	1.566E-03
OS 675(113)	15.29	14.25	4.932E-04	.0426	6.029E-04	.0521	6.780E-04	.0586	1.566E-03
HOT 2929(113)	15.29	14.25	4.932E-04	.0426	6.029E-04	.0521	6.780E-04	.0586	1.566E-03
NOS 7429(113)	15.29	14.25	4.932E-04	.0426	6.029E-04	.0521	6.780E-04	.0586	1.566E-03
TOP 5876(113)	16.39	15.35	4.751E-04	.0411	5.809E-04	.0502	6.533E-04	.0565	1.509E-03
OS 676(113)	16.39	15.35	4.751E-04	.0411	5.809E-04	.0502	6.533E-04	.0565	1.509E-03
HOT 2930(113)	16.39	15.35	4.751E-04	.0411	5.809E-04	.0502	6.533E-04	.0565	1.509E-03
NOS 7430(113)	16.39	15.35	4.751E-04	.0411	5.809E-04	.0502	6.533E-04	.0565	1.509E-03
TOP 5877(113)	17.47	16.43	4.593E-04	.0397	5.615E-04	.0486	6.315E-04	.0546	1.460E-03
OS 677(113)	17.47	16.43	4.593E-04	.0397	5.615E-04	.0486	6.315E-04	.0546	1.460E-03
HOT 2931(113)	17.47	16.43	4.593E-04	.0397	5.615E-04	.0486	6.315E-04	.0546	1.460E-03
NOS 7431(113)	17.47	16.43	4.593E-04	.0397	5.615E-04	.0486	6.315E-04	.0546	1.460E-03
TOP 5878(113)	18.57	17.53	4.447E-04	.0384	5.436E-04	.0470	6.114E-04	.0529	1.413E-03
OS 678(113)	18.57	17.53	4.447E-04	.0384	5.436E-04	.0470	6.114E-04	.0529	1.413E-03
HOT 2932(113)	18.57	17.53	4.447E-04	.0384	5.436E-04	.0470	6.114E-04	.0529	1.413E-03
NOS 7432(113)	18.57	17.53	4.447E-04	.0384	5.436E-04	.0470	6.114E-04	.0529	1.413E-03
TOP 5879(113)	19.65	18.61	4.316E-04	.0373	5.277E-04	.0456	5.934E-04	.0513	1.371E-03
OS 679(113)	19.65	18.61	4.316E-04	.0373	5.277E-04	.0456	5.934E-04	.0513	1.371E-03
HOT 2933(113)	19.67	18.63	4.313E-04	.0373	5.273E-04	.0456	5.930E-04	.0513	1.371E-03
NOS 7433(113)	19.67	18.63	4.313E-04	.0373	5.273E-04	.0456	5.930E-04	.0513	1.371E-03
TOP 5880(113)	20.75	19.71	4.194E-04	.0363	5.127E-04	.0444	5.766E-04	.0499	1.336E-03
OS 680(113)	20.75	19.71	4.194E-04	.0363	5.127E-04	.0444	5.766E-04	.0499	1.336E-03
HOT 2934(113)	20.75	19.71	4.194E-04	.0363	5.127E-04	.0444	5.766E-04	.0499	1.336E-03
NOS 7434(113)	20.75	19.71	4.194E-04	.0363	5.127E-04	.0444	5.766E-04	.0499	1.336E-03

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
16	1	7.90	105.3	1261	24.96	5.02	30.00	2.37	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.012	.511	3743	1.050E-05	7.528E-08	5.222E 05	1.155E-02	3.709E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7371	113	83	.0486	4.182E-02	3.8309E-02
UP SIDE(US)	8410	113	83	.0486	4.182E-02	3.8309E-02
BOTTOM(BOT)	7698	113	83	.0486	4.182E-02	3.8309E-02
TOP(TOP)	7539	113	83	.0486	4.182E-02	3.8309E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 6881(113)	21.85	20.81	4.081E-04	.0353	4.990E-04	.0431	5.611E-04	.0485	1.296E-03
US 681(113)	21.85	20.81	4.081E-04	.0353	4.990E-04	.0431	5.611E-04	.0485	1.296E-03
BOT 2935(113)	21.85	20.81	4.081E-04	.0353	4.990E-04	.0431	5.611E-04	.0485	1.296E-03
NOS 7435(113)	21.85	20.81	4.081E-04	.0353	4.990E-04	.0431	5.611E-04	.0485	1.296E-03
BOT 2936(113)	22.93	21.89	3.980E-04	.0344	4.865E-04	.0420	5.472E-04	.0473	1.263E-03
TOP 6882(113)	22.95	21.91	3.977E-04	.0344	4.863E-04	.0420	5.469E-04	.0473	1.263E-03
US 682(113)	22.95	21.91	3.977E-04	.0344	4.863E-04	.0420	5.469E-04	.0473	1.263E-03
NOS 7436(113)	22.95	21.91	3.977E-04	.0344	4.863E-04	.0420	5.469E-04	.0473	1.263E-03
TOP 6883(113)	24.03	22.99	3.883E-04	.0335	4.747E-04	.0410	5.339E-04	.0461	1.232E-03
US 683(113)	24.03	22.99	3.883E-04	.0335	4.747E-04	.0410	5.339E-04	.0461	1.232E-03
BOT 2937(113)	24.03	22.99	3.883E-04	.0335	4.747E-04	.0410	5.339E-04	.0461	1.232E-03
NOS 7437(113)	24.03	22.99	3.883E-04	.0335	4.747E-04	.0410	5.339E-04	.0461	1.232E-03
TOP 6884(113)	25.13	24.09	3.793E-04	.0328	4.638E-04	.0401	5.216E-04	.0451	1.203E-03
US 684(113)	25.13	24.09	3.793E-04	.0328	4.638E-04	.0401	5.216E-04	.0451	1.203E-03
BOT 2938(113)	25.13	24.09	3.793E-04	.0328	4.638E-04	.0401	5.216E-04	.0451	1.203E-03
NOS 7438(113)	25.13	24.09	3.793E-04	.0328	4.638E-04	.0401	5.216E-04	.0451	1.203E-03
TOP 6885(113)	26.21	25.17	3.711E-04	.0321	4.537E-04	.0392	5.103E-04	.0441	1.179E-03
US 685(113)	26.21	25.17	3.711E-04	.0321	4.537E-04	.0392	5.103E-04	.0441	1.179E-03
BOT 2939(113)	26.21	25.17	3.711E-04	.0321	4.537E-04	.0392	5.103E-04	.0441	1.179E-03
NOS 7439(113)	26.21	25.17	3.711E-04	.0321	4.537E-04	.0392	5.103E-04	.0441	1.179E-03
TOP 6886(113)	27.31	26.27	3.633E-04	.0314	4.441E-04	.0384	4.995E-04	.0431	1.153E-03
US 686(113)	27.31	26.27	3.633E-04	.0314	4.441E-04	.0384	4.995E-04	.0431	1.153E-03
BOT 2940(113)	27.31	26.27	3.633E-04	.0314	4.441E-04	.0384	4.995E-04	.0431	1.153E-03
NOS 7440(113)	27.31	26.27	3.633E-04	.0314	4.441E-04	.0384	4.995E-04	.0431	1.153E-03
TOP 6887(113)	28.41	27.37	3.559E-04	.0307	4.351E-04	.0376	4.893E-04	.0422	1.128E-03
US 687(113)	28.41	27.37	3.559E-04	.0307	4.351E-04	.0376	4.893E-04	.0422	1.128E-03
BOT 2941(113)	28.41	27.37	3.559E-04	.0307	4.351E-04	.0376	4.893E-04	.0422	1.128E-03
NOS 7441(113)	28.41	27.37	3.559E-04	.0307	4.351E-04	.0376	4.893E-04	.0422	1.128E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
16	1	7.90	105.8	1261	24.96	5.02	30.00	2.37	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.012	.514	3743	1.055E-05	7.528E-08	5.247E 05	1.158E-02	3.700E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOAC&K)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7371	113	83	.0486	4.182E-02	3.8309E-02
OP SIDE(OS)	8410	113	83	.0486	4.182E-02	3.8309E-02
BOTTOM(BOT)	7598	113	83	.0486	4.182E-02	3.8309E-02
TOP(TOP)	7539	113	83	.0486	4.182E-02	3.8309E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
OS 688(113)	29.48	28.44	3.491E-04	.0301	4.268E-04	.0368	4.800E-04	.0414	1.106E-03
BOT 2942(113)	29.48	28.44	3.491E-04	.0301	4.268E-04	.0368	4.800E-04	.0414	1.106E-03
TOP 5888(113)	29.51	28.47	3.489E-04	.0301	4.266E-04	.0368	4.798E-04	.0414	1.106E-03
NOS 7442(113)	29.51	28.47	3.489E-04	.0301	4.266E-04	.0368	4.798E-04	.0414	1.106E-03
TOP 5889(113)	30.59	29.55	3.425E-04	.0296	4.188E-04	.0362	4.709E-04	.0407	1.087E-03
OS 689(113)	30.59	29.55	3.425E-04	.0296	4.188E-04	.0362	4.709E-04	.0407	1.087E-03
BOT 2943(113)	30.59	29.55	3.425E-04	.0296	4.188E-04	.0362	4.709E-04	.0407	1.087E-03
NOS 7443(113)	30.59	29.55	3.425E-04	.0296	4.188E-04	.0362	4.709E-04	.0407	1.087E-03
TOP 5890(113)	31.69	30.65	3.363E-04	.0291	4.112E-04	.0355	4.624E-04	.0399	1.067E-03
OS 690(113)	31.69	30.65	3.363E-04	.0291	4.112E-04	.0355	4.624E-04	.0399	1.067E-03
BOT 2944(113)	31.69	30.65	3.363E-04	.0291	4.112E-04	.0355	4.624E-04	.0399	1.067E-03
NOS 7444(113)	31.69	30.65	3.363E-04	.0291	4.112E-04	.0355	4.624E-04	.0399	1.067E-03
TOP 5891(113)	32.76	31.72	3.306E-04	.0285	4.041E-04	.0349	4.545E-04	.0392	1.048E-03
OS 691(113)	32.76	31.72	3.306E-04	.0285	4.041E-04	.0349	4.545E-04	.0392	1.048E-03
BOT 2945(113)	32.76	31.72	3.306E-04	.0285	4.041E-04	.0349	4.545E-04	.0392	1.048E-03
NOS 7445(113)	32.76	31.72	3.306E-04	.0285	4.041E-04	.0349	4.545E-04	.0392	1.048E-03
TOP 5892(113)	33.86	32.82	3.250E-04	.0281	3.973E-04	.0343	4.468E-04	.0386	1.030E-03
OS 692(113)	33.86	32.82	3.250E-04	.0281	3.973E-04	.0343	4.468E-04	.0386	1.030E-03
BOT 2946(113)	33.86	32.82	3.250E-04	.0281	3.973E-04	.0343	4.468E-04	.0386	1.030E-03
NOS 7446(113)	33.86	32.82	3.250E-04	.0281	3.973E-04	.0343	4.468E-04	.0386	1.030E-03
TOP 5893(113)	34.97	33.93	3.197E-04	.0276	3.908E-04	.0337	4.395E-04	.0379	1.013E-03
OS 693(113)	34.97	33.93	3.197E-04	.0276	3.908E-04	.0337	4.395E-04	.0379	1.013E-03
BOT 2947(113)	34.97	33.93	3.197E-04	.0276	3.908E-04	.0337	4.395E-04	.0379	1.013E-03
NOS 7447(113)	34.97	33.93	3.197E-04	.0276	3.908E-04	.0337	4.395E-04	.0379	1.013E-03
TOP 5894(113)	36.04	35.00	3.147E-04	.0272	3.847E-04	.0332	4.327E-04	.0374	9.975E-04
OS 694(113)	36.04	35.00	3.147E-04	.0272	3.847E-04	.0332	4.327E-04	.0374	9.975E-04
BOT 2948(113)	36.04	35.00	3.147E-04	.0272	3.847E-04	.0332	4.327E-04	.0374	9.975E-04
NOS 7448(113)	36.04	35.00	3.147E-04	.0272	3.847E-04	.0332	4.327E-04	.0374	9.975E-04

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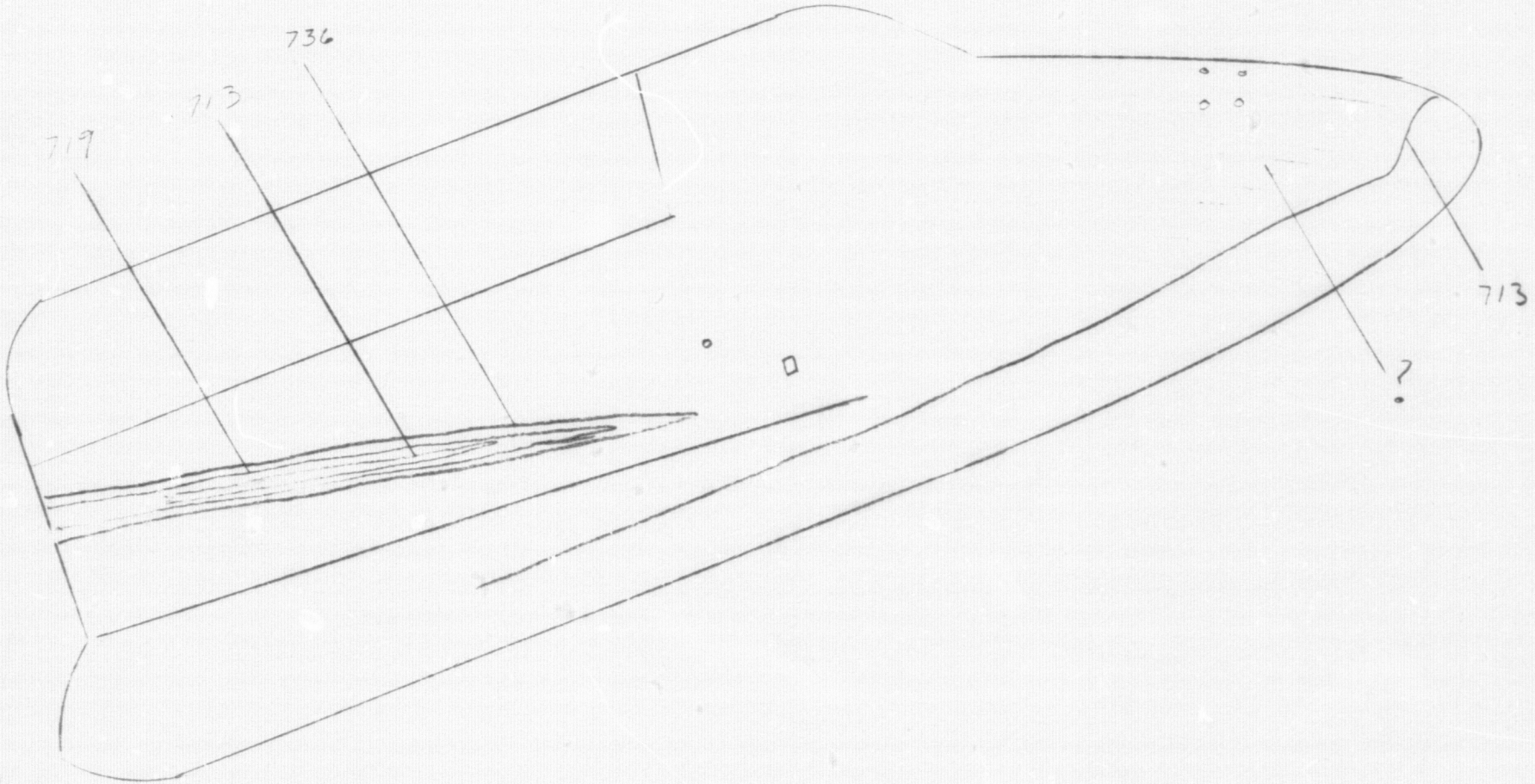
NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
16	1	7.90	105.8	1261	24.96	5.02	30.00	2.37	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.012	.514	3743	1.055E-05	7.529E-08	5.246E 05	1.158E-02	3.700E-02

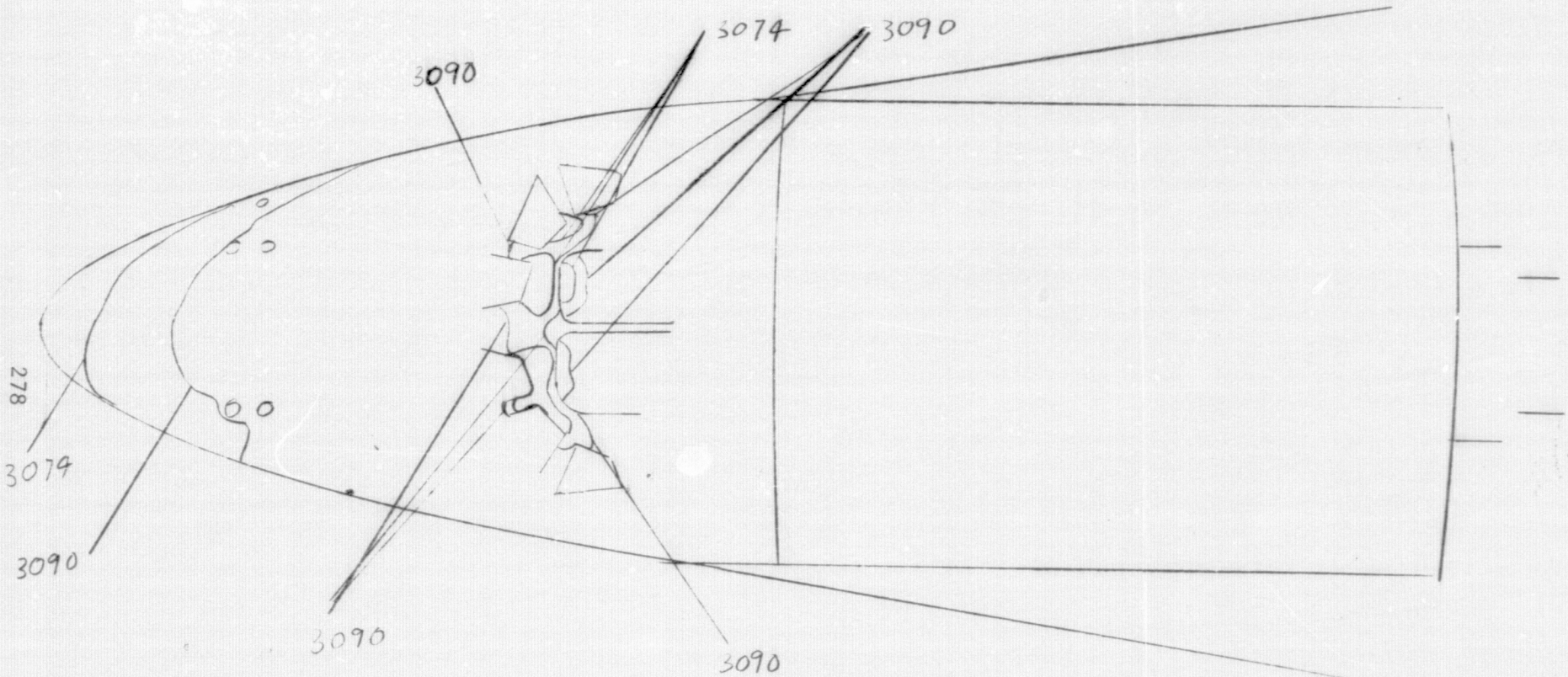
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	83	.0486	4.182E-02	3.8309E-02
OP SIDE(OS)	8410	113	83	.0486	4.182E-02	3.8309E-02
HOTTOM(BOT)	7698	113	83	.0486	4.182E-02	3.8309E-02
TOP(TOP)	7539	113	83	.0486	4.182E-02	3.8309E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 5895(113)	37.14	36.10	3.099E-04	.0267	3.788E-04	.0327	4.260E-04	.0368	9.812E-04
OS 695(113)	37.14	36.10	3.099E-04	.0267	3.788E-04	.0327	4.260E-04	.0368	9.812E-04
HOT 2949(113)	37.14	36.10	3.099E-04	.0267	3.788E-04	.0327	4.260E-04	.0368	9.812E-04
NOS 7449(113)	37.14	36.10	3.099E-04	.0267	3.788E-04	.0327	4.260E-04	.0368	9.812E-04
HOT 2950(113)	38.22	37.18	3.053E-04	.0264	3.733E-04	.0322	4.198E-04	.0362	9.678E-04
TOP 5896(113)	38.24	37.20	3.052E-04	.0263	3.732E-04	.0322	4.197E-04	.0362	9.666E-04
OS 696(113)	38.24	37.20	3.052E-04	.0263	3.732E-04	.0322	4.197E-04	.0362	9.666E-04
NOS 7450(113)	38.24	37.20	3.052E-04	.0263	3.732E-04	.0322	4.197E-04	.0362	9.666E-04
TOP 5897(113)	39.32	38.28	3.009E-04	.0260	3.679E-04	.0318	4.137E-04	.0357	9.538E-04
OS 697(113)	39.32	38.28	3.009E-04	.0260	3.679E-04	.0318	4.137E-04	.0357	9.538E-04
HOT 2951(113)	39.32	38.28	3.009E-04	.0260	3.679E-04	.0318	4.137E-04	.0357	9.538E-04
NOS 7451(113)	39.32	38.28	3.009E-04	.0260	3.679E-04	.0318	4.137E-04	.0357	9.538E-04
TOP 5898(113)	40.42	39.38	2.967E-04	.0256	3.627E-04	.0313	4.079E-04	.0352	9.412E-04
OS 698(113)	40.42	39.38	2.967E-04	.0256	3.627E-04	.0313	4.079E-04	.0352	9.412E-04
HOT 2952(113)	40.42	39.38	2.967E-04	.0256	3.627E-04	.0313	4.079E-04	.0352	9.412E-04
NOS 7452(113)	40.42	39.38	2.967E-04	.0256	3.627E-04	.0313	4.079E-04	.0352	9.412E-04
OS 699(113)	41.50	40.46	2.927E-04	.0253	3.579E-04	.0309	4.024E-04	.0347	9.269E-04
HOT 2953(113)	41.50	40.46	2.427E-04	.0253	3.579E-04	.0309	4.024E-04	.0347	9.269E-04
TOP 5899(113)	41.52	40.48	2.926E-04	.0253	3.577E-04	.0309	4.023E-04	.0347	9.266E-04
NOS 7453(113)	41.52	40.48	2.926E-04	.0253	3.577E-04	.0309	4.023E-04	.0347	9.266E-04
	42.10		MODEL HAS LEFT CENTERLINE						



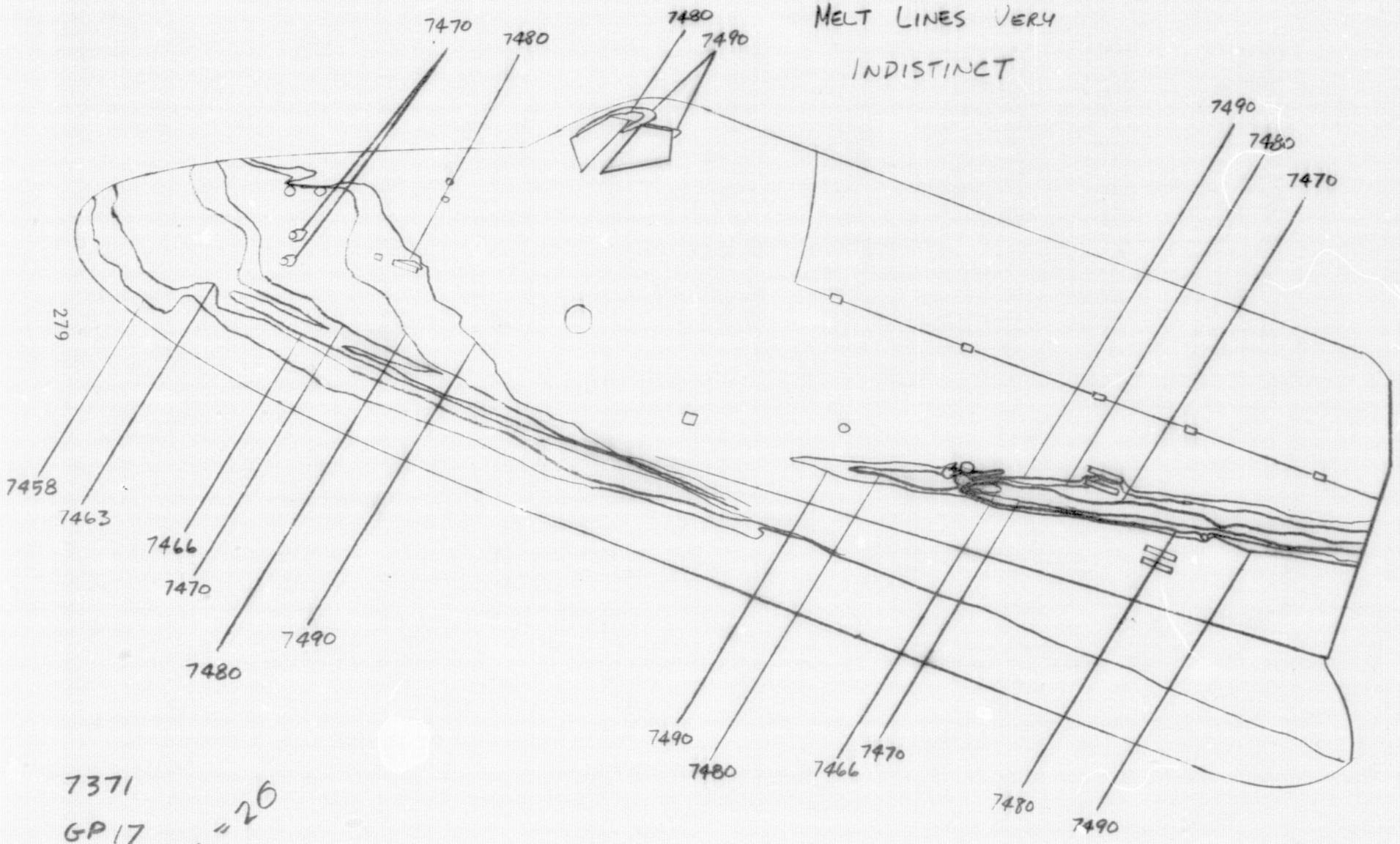
8410
GRP 17

±-20



7671
GRP 17

$\alpha = 20$



7371

GP 17

8" = 20

3/29/74

NASA-RI 0H50

VA52E

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
17	1	7.90	106.2	1271	20.04	9.96	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.516	3759	1.051E-05	7.590E-08	5.203E 05	1.162E-02	3.711E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7371	113	78	.0486	0	0
UP SIDE(OS)	8410	113	78	.0486	0	0
BOTTOM(BOT)	7671	113	78	.0486	0	0
TOP(TOP)	7539	113	78	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TO 5900(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 700(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 3054(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7454(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 5901(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 701(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 3055(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7455(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOF 5902(113)	2.18	1.17	1.979E-03	.1701	2.415E-03	.2075	2.713E-03	.2332	6.254E-03
OS 702(113)	2.18	1.17	1.979E-03	.1701	2.415E-03	.2075	2.713E-03	.2332	6.254E-03
HOT 3056(113)	2.18	1.17	1.979E-03	.1701	2.415E-03	.2075	2.713E-03	.2332	6.254E-03
NOS 7456(113)	2.18	1.17	1.979E-03	.1701	2.415E-03	.2075	2.713E-03	.2332	6.254E-03
OS 703(113)	3.25	2.24	1.427E-03	.1226	1.741E-03	.1496	1.957E-03	.1681	4.510E-03
HOT 3057(113)	3.25	2.24	1.427E-03	.1226	1.741E-03	.1496	1.957E-03	.1681	4.510E-03
TOF 5903(113)	3.28	2.27	1.419E-03	.1220	1.732E-03	.1488	1.946E-03	.1672	4.485E-03
NOS 7457(113)	3.28	2.27	1.419E-03	.1220	1.732E-03	.1488	1.946E-03	.1672	4.485E-03
TOF 5904(113)	4.36	3.34	1.169E-03	.1004	1.426E-03	.1225	1.602E-03	.1377	3.693E-03
OS 704(113)	4.36	3.34	1.169E-03	.1004	1.426E-03	.1225	1.602E-03	.1377	3.693E-03
HOT 3058(113)	4.36	3.34	1.169E-03	.1004	1.426E-03	.1225	1.602E-03	.1377	3.693E-03
NOS 7458(113)	4.36	3.34	1.169E-03	.1004	1.426E-03	.1225	1.602E-03	.1377	3.693E-03
HOT 3059(113)	5.43	4.42	1.017E-03	.0874	1.240E-03	.1066	1.394E-03	.1198	3.212E-03
TOF 5905(113)	5.46	4.44	1.014E-03	.0871	1.237E-03	.1062	1.390E-03	.1194	3.200E-03
OS 705(113)	5.46	4.44	1.014E-03	.0871	1.237E-03	.1062	1.390E-03	.1194	3.200E-03
NOS 7459(113)	5.46	4.44	1.014E-03	.0871	1.237E-03	.1062	1.390E-03	.1194	3.200E-03
TOF 5906(113)	6.53	5.52	9.096E-04	.0782	1.110E-03	.0953	1.247E-03	.1071	2.874E-03
OS 706(113)	6.53	5.52	9.096E-04	.0782	1.110E-03	.0953	1.247E-03	.1071	2.874E-03
HOT 3060(113)	6.53	5.52	9.096E-04	.0782	1.110E-03	.0953	1.247E-03	.1071	2.874E-03
NOS 7460(113)	6.53	5.52	9.096E-04	.0782	1.110E-03	.0953	1.247E-03	.1071	2.874E-03

REPRODUCIBILITY OF THE

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* UNCLASSIFIED *
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3/29/74

NASA-RI 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
17	1	7.90	106.5	1271	20.04	9.96	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.517	3759	1.054E-05	7.591E-08	5.217E 05	1.164E-02	3.706E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACXK)	TRAP(TO)	BETA(TO)
NOF SIDE(NOS)	7371	113	78	.0481	4.775E-02	4.3974E-02
UP SIDE(OS)	8410	113	78	.0481	4.775E-02	4.3974E-02
HOTTOM(BOT)	7671	113	78	.0481	4.775E-02	4.3974E-02
TOP(TOP)	7539	113	78	.0481	4.775E-02	4.3974E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5907(113)	7.63	6.62	8.305E-04	.0714	1.013E-03	.0871	1.138E-03	.0979	2.627E-03
OS 707(113)	7.63	6.62	8.305E-04	.0714	1.013E-03	.0871	1.138E-03	.0979	2.627E-03
HOT 3061(113)	7.63	6.62	8.305E-04	.0714	1.013E-03	.0871	1.138E-03	.0979	2.627E-03
NOS 7461(113)	7.63	6.62	8.305E-04	.0714	1.013E-03	.0871	1.138E-03	.0979	2.627E-03
TOP 5908(113)	8.71	7.70	7.703E-04	.0662	9.396E-04	.0807	1.056E-03	.0907	2.432E-03
OS 708(113)	8.71	7.70	7.703E-04	.0662	9.396E-04	.0807	1.056E-03	.0907	2.432E-03
HOT 3062(113)	8.71	7.70	7.703E-04	.0662	9.396E-04	.0807	1.056E-03	.0907	2.432E-03
NOS 7462(113)	8.74	7.72	7.690E-04	.0660	9.381E-04	.0806	1.054E-03	.0905	2.428E-03
TOP 5909(113)	9.81	8.80	7.204E-04	.0619	8.789E-04	.0755	9.876E-04	.0848	2.274E-03
OS 709(113)	9.81	8.80	7.204E-04	.0619	8.789E-04	.0755	9.876E-04	.0848	2.274E-03
HOT 3063(113)	9.81	8.80	7.204E-04	.0619	8.789E-04	.0755	9.876E-04	.0848	2.274E-03
NOS 7463(113)	9.81	8.80	7.204E-04	.0619	8.789E-04	.0755	9.876E-04	.0848	2.274E-03
TOP 5910(113)	10.91	9.90	6.792E-04	.0583	8.286E-04	.0711	9.311E-04	.0799	2.142E-03
OS 710(113)	10.91	9.90	6.792E-04	.0583	8.286E-04	.0711	9.311E-04	.0799	2.142E-03
HOT 3064(113)	10.91	9.90	6.792E-04	.0583	8.286E-04	.0711	9.311E-04	.0799	2.142E-03
NOS 7464(113)	10.91	9.90	6.792E-04	.0583	8.286E-04	.0711	9.311E-04	.0799	2.142E-03
HOT 3065(113)	11.99	10.98	6.450E-04	.0554	7.869E-04	.0675	8.843E-04	.0759	2.032E-03
TOP 5911(113)	12.01	11.00	6.443E-04	.0553	7.860E-04	.0675	8.833E-04	.0759	2.034E-03
OS 711(113)	12.01	11.00	6.443E-04	.0553	7.860E-04	.0675	8.833E-04	.0759	2.034E-03
NOS 7465(113)	12.01	11.00	6.443E-04	.0553	7.860E-04	.0675	8.833E-04	.0759	2.034E-03
TOP 5912(113)	13.09	12.08	6.149E-04	.0528	7.502E-04	.0644	8.430E-04	.0723	1.938E-03
OS 712(113)	13.09	12.08	6.149E-04	.0528	7.502E-04	.0644	8.430E-04	.0723	1.938E-03
HOT 3066(113)	13.09	12.08	6.149E-04	.0528	7.502E-04	.0644	8.430E-04	.0723	1.938E-03
NOS 7466(113)	13.09	12.08	6.149E-04	.0528	7.502E-04	.0644	8.430E-04	.0723	1.938E-03
TOP 5913(113)	14.19	13.18	5.887E-04	.0505	7.181E-04	.0617	8.070E-04	.0693	1.857E-03
OS 713(113)	14.19	13.18	5.887E-04	.0505	7.181E-04	.0617	8.070E-04	.0693	1.857E-03
HOT 3067(113)	14.19	13.18	5.887E-04	.0505	7.181E-04	.0617	8.070E-04	.0693	1.857E-03
NOS 7467(113)	14.19	13.18	5.887E-04	.0505	7.181E-04	.0617	8.070E-04	.0693	1.857E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
17	1	7.90	106.7	1271	20.04	9.96	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.016	.518	3759	1.055E-05	7.592E-08	5.226E 05	1.165E+02	3.703E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	78	.0486	4.775E-02	4.3974E-02
OP SIDE(OS)	8416	113	78	.0486	4.775E-02	4.3974E-02
BOT(COM(BOT)	7671	113	78	.0486	4.775E-02	4.3974E-02
TOP(TOP)	7539	113	78	.0486	4.775E-02	4.3974E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
BOT 3068(113)	15.27	14.26	5.660E-04	.0486	6.905E-04	.0593	7.759E-04	.0666	1.785E-03
TOP 5914(113)	15.29	14.28	5.655E-04	.0485	6.899E-04	.0592	7.753E-04	.0666	1.784E-03
OS 714(113)	15.29	14.28	5.655E-04	.0485	6.899E-04	.0592	7.753E-04	.0666	1.784E-03
NOS 7468(113)	15.29	14.28	5.655E-04	.0485	6.899E-04	.0592	7.753E-04	.0666	1.784E-03
TOP 5915(113)	16.37	15.36	5.454E-04	.0468	6.653E-04	.0571	7.476E-04	.0642	1.722E-03
OS 715(113)	16.37	15.36	5.454E-04	.0468	6.653E-04	.0571	7.476E-04	.0642	1.722E-03
BOT 3069(113)	16.37	15.36	5.454E-04	.0468	6.653E-04	.0571	7.476E-04	.0642	1.722E-03
NOS 7469(113)	16.37	15.36	5.454E-04	.0468	6.653E-04	.0571	7.476E-04	.0642	1.722E-03
TOP 5916(113)	17.47	16.46	5.268E-04	.0452	6.426E-04	.0552	7.222E-04	.0620	1.661E-03
OS 716(113)	17.47	16.46	5.268E-04	.0452	6.426E-04	.0552	7.222E-04	.0620	1.661E-03
BOT 3070(113)	17.47	16.46	5.268E-04	.0452	6.426E-04	.0552	7.222E-04	.0620	1.661E-03
NOS 7470(113)	17.47	16.46	5.268E-04	.0452	6.426E-04	.0552	7.222E-04	.0620	1.661E-03
TOP 5917(113)	18.55	17.53	5.104E-04	.0438	6.226E-04	.0534	6.996E-04	.0600	1.608E-03
OS 717(113)	18.55	17.53	5.104E-04	.0438	6.226E-04	.0534	6.996E-04	.0600	1.608E-03
BOT 3071(113)	18.55	17.53	5.104E-04	.0438	6.226E-04	.0534	6.996E-04	.0600	1.608E-03
NOS 7471(113)	18.57	17.56	5.100E-04	.0438	6.222E-04	.0534	6.991E-04	.0600	1.608E-03
TOP 5918(113)	19.65	18.64	4.951E-04	.0425	6.039E-04	.0518	6.787E-04	.0582	1.560E-03
OS 718(113)	19.65	18.64	4.951E-04	.0425	6.039E-04	.0518	6.787E-04	.0582	1.560E-03
BOT 3072(113)	19.65	18.64	4.951E-04	.0425	6.039E-04	.0518	6.787E-04	.0582	1.560E-03
NOS 7472(113)	19.65	18.64	4.951E-04	.0425	6.039E-04	.0518	6.787E-04	.0582	1.560E-03
TOP 5919(113)	20.72	19.71	4.814E-04	.0413	5.872E-04	.0504	6.599E-04	.0566	1.517E-03
OS 719(113)	20.75	19.74	4.810E-04	.0413	5.868E-04	.0504	6.594E-04	.0566	1.516E-03
BOT 3073(113)	20.75	19.74	4.810E-04	.0413	5.868E-04	.0504	6.594E-04	.0566	1.516E-03
NOS 7473(113)	20.75	19.74	4.810E-04	.0413	5.868E-04	.0504	6.594E-04	.0566	1.516E-03
TOP 5920(113)	21.83	20.81	4.684E-04	.0402	5.715E-04	.0490	6.422E-04	.0551	1.476E-03
OS 720(113)	21.83	20.81	4.684E-04	.0402	5.715E-04	.0490	6.422E-04	.0551	1.476E-03
BOT 3074(113)	21.83	20.81	4.684E-04	.0402	5.715E-04	.0490	6.422E-04	.0551	1.476E-03
NOS 7474(113)	21.83	20.81	4.684E-04	.0402	5.715E-04	.0490	6.422E-04	.0551	1.476E-03

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3/29/74

NASA-RI OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B
VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
17	1	7.90	106.8	1271	20.04	9-96	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.515	3759	1.056E-05	7.592E-08	5.231E 05	1.165E-02	3.701E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	78	.0486	4.775E-02	4.3974E-02
UP SIDE(US)	8410	113	78	.0486	4.775E-02	4.3974E-02
BOTTOM(BOT)	7671	113	78	.0486	4.775E-02	4.3974E-02
TOP(TOP)	7539	113	78	.0486	4.775E-02	4.3974E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5921(113)	22.93	21.91	4.565E-04	.0392	5.569E-04	.0478	6.258E-04	.0537	1.437E-03
US 721(113)	22.93	21.91	4.565E-04	.0392	5.569E-04	.0478	6.258E-04	.0537	1.437E-03
BOT 3075(113)	22.93	21.91	4.565E-04	.0392	5.569E-04	.0478	6.258E-04	.0537	1.437E-03
NOS 7475(113)	22.93	21.91	4.565E-04	.0392	5.569E-04	.0478	6.258E-04	.0537	1.437E-03
BOT 3076(113)	24.00	22.99	4.457E-04	.0382	5.437E-04	.0466	6.110E-04	.0524	1.403E-03
TOP 5922(113)	24.03	23.02	4.455E-04	.0382	5.434E-04	.0466	6.107E-04	.0524	1.402E-03
US 722(113)	24.03	23.02	4.455E-04	.0382	5.434E-04	.0466	6.107E-04	.0524	1.402E-03
NOS 7476(113)	24.03	23.02	4.455E-04	.0382	5.434E-04	.0466	6.107E-04	.0524	1.402E-03
TOP 5923(113)	25.10	24.09	4.354E-04	.0373	5.312E-04	.0456	5.969E-04	.0512	1.371E-03
US 723(113)	25.10	24.09	4.354E-04	.0373	5.312E-04	.0456	5.969E-04	.0512	1.371E-03
BOT 3077(113)	25.10	24.09	4.354E-04	.0373	5.312E-04	.0456	5.969E-04	.0512	1.371E-03
NOS 7477(113)	25.10	24.09	4.354E-04	.0373	5.312E-04	.0456	5.969E-04	.0512	1.371E-03
TOP 5924(113)	26.21	25.19	4.258E-04	.0365	5.194E-04	.0446	5.837E-04	.0501	1.342E-03
US 724(113)	26.21	25.19	4.258E-04	.0365	5.194E-04	.0446	5.837E-04	.0501	1.342E-03
BOT 3078(113)	26.21	25.19	4.258E-04	.0365	5.194E-04	.0446	5.837E-04	.0501	1.342E-03
NOS 7478(113)	26.21	25.19	4.258E-04	.0365	5.194E-04	.0446	5.837E-04	.0501	1.342E-03
US 725(113)	27.28	26.27	4.170E-04	.0357	5.087E-04	.0436	5.716E-04	.0490	1.311E-03
BOT 3079(113)	27.28	26.27	4.170E-04	.0357	5.087E-04	.0436	5.716E-04	.0490	1.311E-03
TOP 5925(113)	27.31	26.29	4.168E-04	.0358	5.084E-04	.0436	5.713E-04	.0490	1.313E-03
NOS 7479(113)	27.31	26.29	4.168E-04	.0358	5.084E-04	.0436	5.713E-04	.0490	1.313E-03
TOP 5926(113)	28.38	27.37	4.085E-04	.0350	4.983E-04	.0427	5.600E-04	.0480	1.285E-03
US 726(113)	28.38	27.37	4.085E-04	.0350	4.983E-04	.0427	5.600E-04	.0480	1.285E-03
BOT 3080(113)	28.38	27.37	4.085E-04	.0350	4.983E-04	.0427	5.600E-04	.0480	1.285E-03
NOS 7480(113)	28.38	27.37	4.085E-04	.0350	4.983E-04	.0427	5.600E-04	.0480	1.285E-03
TOP 5927(113)	29.48	28.47	4.005E-04	.0343	4.886E-04	.0419	5.490E-04	.0471	1.260E-03
US 727(113)	29.48	28.47	4.005E-04	.0343	4.886E-04	.0419	5.490E-04	.0471	1.260E-03
BOT 3081(113)	29.48	28.47	4.005E-04	.0343	4.886E-04	.0419	5.490E-04	.0471	1.260E-03
NOS 7481(113)	29.48	28.47	4.005E-04	.0343	4.886E-04	.0419	5.490E-04	.0471	1.260E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VASIS — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
17	1	7.90	107.0	1271	20.04	9.96	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	MREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.520	3759	1.058E-05	7.592E-08	5.240E 05	1.167E-02	3.698E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7371	113	78	.0486	4.775E-02	4.3974E-02
UP SIDE(US)	8410	113	78	.0486	4.775E-02	4.3974E-02
NOTICH(BOT)	7671	113	78	.0486	4.775E-02	4.3974E-02
TOP(TOP)	7539	113	78	.0486	4.775E-02	4.3974E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	SI(TO)
TOP 5928(113)	30.56	29.55	3.932E-04	.0337	4.796E-04	.0411	5.390E-04	.0462	1.238E-03
US 728(113)	30.56	29.55	3.932E-04	.0337	4.796E-04	.0411	5.390E-04	.0462	1.238E-03
HOT 3082(113)	30.56	29.55	3.932E-04	.0337	4.796E-04	.0411	5.390E-04	.0462	1.238E-03
NOS 7482(113)	30.56	29.55	3.932E-04	.0337	4.796E-04	.0411	5.390E-04	.0462	1.238E-03
TOP 5929(113)	31.66	30.65	3.860E-04	.0331	4.709E-04	.0404	5.292E-04	.0454	1.214E-03
US 729(113)	31.66	30.65	3.860E-04	.0331	4.709E-04	.0404	5.292E-04	.0454	1.214E-03
HOT 3083(113)	31.66	30.65	3.860E-04	.0331	4.709E-04	.0404	5.292E-04	.0454	1.214E-03
NOS 7483(113)	31.66	30.65	3.860E-04	.0331	4.709E-04	.0404	5.292E-04	.0454	1.214E-03
TOP 5930(113)	32.74	31.73	3.794E-04	.0325	4.629E-04	.0397	5.201E-04	.0446	1.194E-03
US 730(113)	32.74	31.73	3.794E-04	.0325	4.629E-04	.0397	5.201E-04	.0446	1.194E-03
HOT 3084(113)	32.76	31.75	3.793E-04	.0325	4.627E-04	.0397	5.199E-04	.0446	1.193E-03
NOS 7484(113)	32.76	31.75	3.793E-04	.0325	4.627E-04	.0397	5.199E-04	.0446	1.193E-03
TOP 5931(113)	33.84	32.83	3.730E-04	.0320	4.550E-04	.0390	5.113E-04	.0438	1.173E-03
US 731(113)	33.84	32.83	3.730E-04	.0320	4.550E-04	.0390	5.113E-04	.0438	1.173E-03
HOT 3085(113)	33.84	32.83	3.730E-04	.0320	4.550E-04	.0390	5.113E-04	.0438	1.173E-03
NOS 7485(113)	33.84	32.83	3.730E-04	.0320	4.550E-04	.0390	5.113E-04	.0438	1.173E-03
TOP 5932(113)	34.94	33.93	3.669E-04	.0315	4.476E-04	.0384	5.030E-04	.0431	1.154E-03
US 732(113)	34.94	33.93	3.669E-04	.0315	4.476E-04	.0384	5.030E-04	.0431	1.154E-03
HOT 3086(113)	34.94	33.93	3.669E-04	.0315	4.476E-04	.0384	5.030E-04	.0431	1.154E-03
NOS 7486(113)	34.94	33.93	3.669E-04	.0315	4.476E-04	.0384	5.030E-04	.0431	1.154E-03
HOT 3087(113)	36.02	35.00	3.612E-04	.0310	4.407E-04	.0378	4.952E-04	.0424	1.135E-03
TOP 5933(113)	36.04	35.03	3.611E-04	.0310	4.405E-04	.0378	4.950E-04	.0424	1.136E-03
US 733(113)	36.04	35.03	3.611E-04	.0310	4.405E-04	.0378	4.950E-04	.0424	1.136E-03
NOS 7487(113)	36.04	35.03	3.611E-04	.0310	4.405E-04	.0378	4.950E-04	.0424	1.136E-03
TOP 5934(113)	37.12	36.11	3.557E-04	.0305	4.339E-04	.0372	4.876E-04	.0418	1.118E-03
US 734(113)	37.12	36.11	3.557E-04	.0305	4.339E-04	.0372	4.876E-04	.0418	1.118E-03
HOT 3088(113)	37.12	36.11	3.557E-04	.0305	4.339E-04	.0372	4.876E-04	.0418	1.118E-03
NOS 7488(113)	37.12	36.11	3.557E-04	.0305	4.339E-04	.0372	4.876E-04	.0418	1.118E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

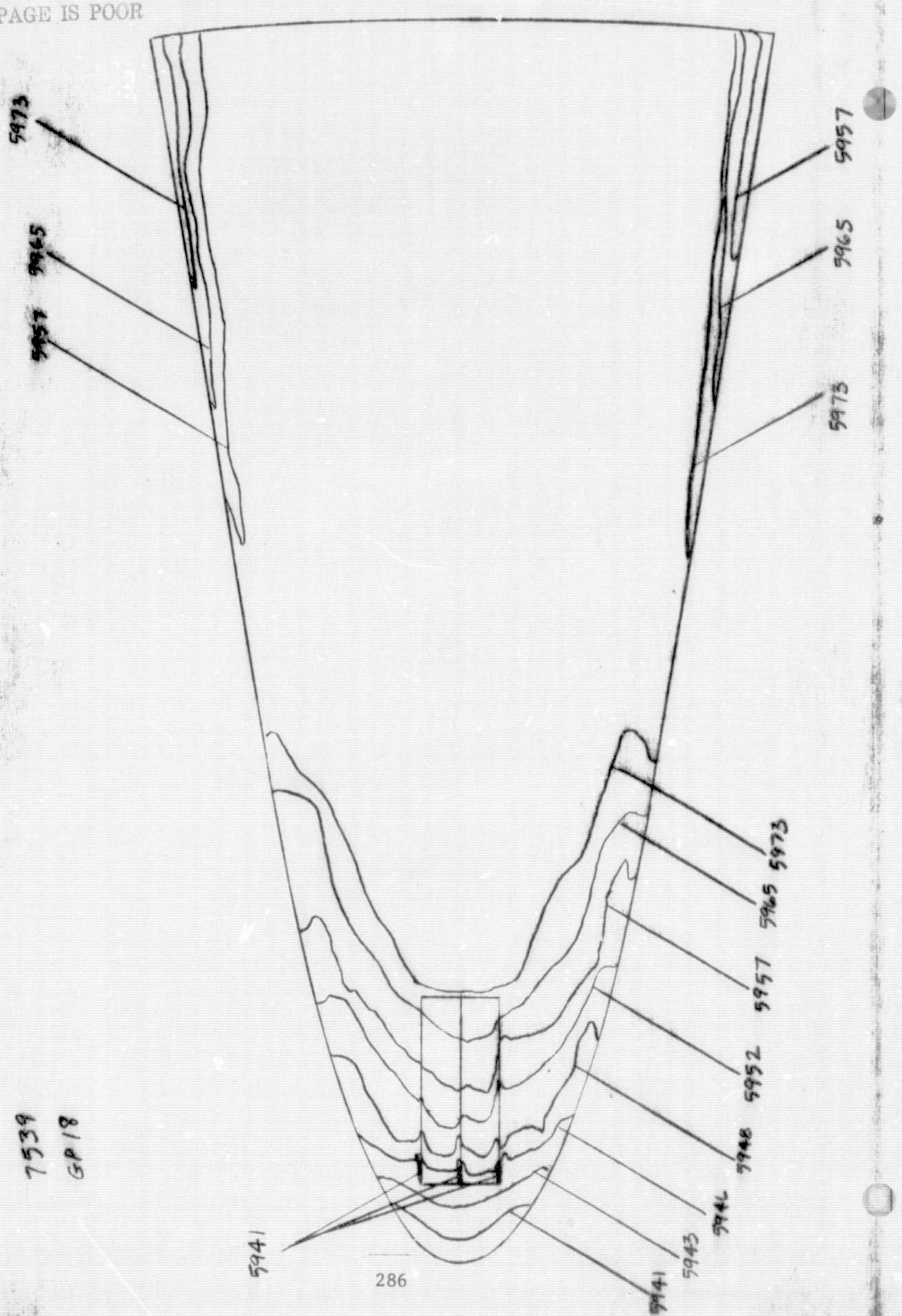
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
17	1	7.90	107.1	1271	20.04	9.96	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.012	.520	3759	1.059E-05	7.592E-08	5.246E 05	1.167E-02	3.696E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	FETA(TO)
NOP SIDE(NOS)	7371	113	78	.0486	4.775E-02	4.3974E-02
UP SIDE(US)	8410	113	78	.0486	4.775E-02	4.3974E-02
BOTTOM(BOT)	7671	113	78	.0486	4.775E-02	4.3974E-02
TOP(TOP)	7539	113	78	.0486	4.775E-02	4.3974E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5935(113)	38.22	37.21	3.504E-04	.0300	4.274E-04	.0366	4.803E-04	.0412	1.101E-03
US 735(113)	38.22	37.21	3.504E-04	.0300	4.274E-04	.0366	4.803E-04	.0412	1.101E-03
BOT 7089(113)	38.22	37.21	3.504E-04	.0300	4.274E-04	.0366	4.803E-04	.0412	1.101E-03
NOS 7489(113)	38.22	37.21	3.504E-04	.0300	4.274E-04	.0366	4.803E-04	.0412	1.101E-03
US 736(113)	39.30	38.28	3.454E-04	.0296	4.214E-04	.0361	4.735E-04	.0406	1.086E-03
TOP 5936(113)	39.32	38.31	3.453E-04	.0296	4.212E-04	.0361	4.733E-04	.0406	1.086E-03
BOT 7090(113)	39.32	38.31	3.453E-04	.0296	4.212E-04	.0361	4.733E-04	.0406	1.086E-03
NOS 7490(113)	39.32	38.31	3.453E-04	.0296	4.212E-04	.0361	4.733E-04	.0406	1.086E-03
TOP 5937(113)	40.40	39.38	3.405E-04	.0292	4.154E-04	.0356	4.668E-04	.0400	1.071E-03
US 737(113)	40.40	39.38	3.405E-04	.0292	4.154E-04	.0356	4.668E-04	.0400	1.071E-03
BOT 7091(113)	40.40	39.38	3.405E-04	.0292	4.154E-04	.0356	4.668E-04	.0400	1.071E-03
NOS 7491(113)	40.40	39.38	3.405E-04	.0292	4.154E-04	.0356	4.668E-04	.0400	1.071E-03
	40.65		MODEL HAS LEFT CENTERLINE						

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



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VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
18	1	7.90	107.4	1272	20.01	9.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
94.4	.012	.522	3760	1.062E-05	7.597E-08	5.255E 05	1.169E-02	3.692E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	150	80	.0505	0	0
OP SIDE(OS)	8410	150	80	.0505	0	0
BOTTOM(BOT)	7671	150	80	.0505	0	0
TOP(TOP)	7539	150	80	.0505	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TO 5938(150)		.03	MODEL HAS NOT REACHED CENTERLINE						
OS 738(150)		.03	MODEL HAS NOT REACHED CENTERLINE						
HO 3092(150)		.03	MODEL HAS NOT REACHED CENTERLINE						
NO 7492(150)		.03	MODEL HAS NOT REACHED CENTERLINE						
TO 5939(150)		1.10	MODEL HAS NOT REACHED CENTERLINE						
OS 739(150)		1.10	MODEL HAS NOT REACHED CENTERLINE						
HO 3093(150)		1.10	MODEL HAS NOT REACHED CENTERLINE						
NO 7493(150)		1.10	MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =		1.80							
TOP 5940(150)	2.18	1.17	4.289E-03	.3667	5.282E-03	.4517	5.975E-03	.5109	1.340E-02
OS 740(150)	2.18	1.17	4.289E-03	.3667	5.282E-03	.4517	5.975E-03	.5109	1.340E-02
HOT 3094(150)	2.18	1.17	4.289E-03	.3667	5.282E-03	.4517	5.975E-03	.5109	1.340E-02
NOS 7494(150)	2.18	1.17	4.289E-03	.3667	5.282E-03	.4517	5.975E-03	.5109	1.340E-02
TOP 5941(150)	3.28	2.27	3.075E-03	.2629	3.787E-03	.3237	4.285E-03	.3662	9.602E-03
OS 741(150)	3.28	2.27	3.075E-03	.2629	3.787E-03	.3237	4.285E-03	.3662	9.602E-03
HOT 3095(150)	3.28	2.27	3.075E-03	.2629	3.787E-03	.3237	4.285E-03	.3662	9.602E-03
NOS 7495(150)	3.28	2.27	3.075E-03	.2629	3.787E-03	.3237	4.285E-03	.3662	9.602E-03
TOP 5942(150)	4.36	3.34	2.533E-03	.2166	3.119E-03	.2667	3.528E-03	.3017	7.914E-03
OS 742(150)	4.36	3.34	2.533E-03	.2166	3.119E-03	.2667	3.528E-03	.3017	7.914E-03
HOT 3096(150)	4.36	3.34	2.533E-03	.2166	3.119E-03	.2667	3.528E-03	.3017	7.914E-03
NOS 7496(150)	4.36	3.34	2.533E-03	.2166	3.119E-03	.2667	3.528E-03	.3017	7.914E-03
TOP 5943(150)	5.46	4.44	2.196E-03	.1878	2.705E-03	.2313	3.060E-03	.2617	6.864E-03
OS 743(150)	5.46	4.44	2.196E-03	.1878	2.705E-03	.2313	3.060E-03	.2617	6.864E-03
HOT 3097(150)	5.46	4.44	2.196E-03	.1878	2.705E-03	.2313	3.060E-03	.2617	6.864E-03
NOS 7497(150)	5.46	4.44	2.196E-03	.1878	2.705E-03	.2313	3.060E-03	.2617	6.864E-03
TOP 5944(150)	6.56	5.55	1.966E-03	.1681	2.422E-03	.2070	2.739E-03	.2341	6.139E-03
OS 744(150)	6.56	5.55	1.966E-03	.1681	2.422E-03	.2070	2.739E-03	.2341	6.139E-03
HOT 3098(150)	6.56	5.55	1.966E-03	.1681	2.422E-03	.2070	2.739E-03	.2341	6.139E-03
NOS 7498(150)	6.56	5.55	1.966E-03	.1681	2.422E-03	.2070	2.739E-03	.2341	6.139E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
18	1	7.90	107.6	1272	20.01	9.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.012	.523	3760	1.064E-05	7.597E-08	5.264E 05	1.170E-02	3.689E-02

CAVERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	150	80	.0505	9.559E-02	9.1696E-02
UP SIDE(US)	8410	150	80	.0505	9.559E-02	9.1696E-02
BOTTOM(BOT)	7671	150	80	.0505	9.559E-02	9.1696E-02
TOP(TOP)	7539	150	80	.0505	9.559E-02	9.1696E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5945(150)	7.63	6.62	1.799E-03	.1537	2.216E-03	.1893	2.507E-03	.2142	5.613E-03
US 745(150)	7.63	6.62	1.799E-03	.1537	2.216E-03	.1893	2.507E-03	.2142	5.613E-03
BOT 3099(150)	7.63	6.62	1.799E-03	.1537	2.216E-03	.1893	2.507E-03	.2142	5.613E-03
NOS 7499(150)	7.63	6.62	1.799E-03	.1537	2.216E-03	.1893	2.507E-03	.2142	5.613E-03
TOP 5946(150)	8.74	7.72	1.666E-03	.1424	2.052E-03	.1753	2.321E-03	.1983	5.197E-03
US 746(150)	8.74	7.72	1.666E-03	.1424	2.052E-03	.1753	2.321E-03	.1983	5.197E-03
BOT 3100(150)	8.74	7.72	1.666E-03	.1424	2.052E-03	.1753	2.321E-03	.1983	5.197E-03
NOS 7500(150)	8.74	7.72	1.666E-03	.1424	2.052E-03	.1753	2.321E-03	.1983	5.197E-03
BOT 3101(150)	9.81	8.80	1.561E-03	.1334	1.922E-03	.1642	2.175E-03	.1858	4.869E-03
TOP 5947(150)	9.84	8.82	1.559E-03	.1331	1.920E-03	.1639	2.172E-03	.1854	4.858E-03
US 747(150)	9.84	8.82	1.559E-03	.1331	1.920E-03	.1639	2.172E-03	.1854	4.858E-03
NOS 7501(150)	9.84	8.82	1.559E-03	.1331	1.920E-03	.1639	2.172E-03	.1854	4.858E-03
TOP 5948(150)	10.91	9.90	1.472E-03	.1257	1.812E-03	.1548	2.050E-03	.1751	4.586E-03
US 748(150)	10.91	9.90	1.472E-03	.1257	1.812E-03	.1548	2.050E-03	.1751	4.586E-03
BOT 3102(150)	10.91	9.90	1.472E-03	.1257	1.812E-03	.1548	2.050E-03	.1751	4.586E-03
NOS 7502(150)	10.91	9.90	1.472E-03	.1257	1.812E-03	.1548	2.050E-03	.1751	4.586E-03
TOP 5949(150)	12.01	11.00	1.396E-03	.1191	1.719E-03	.1467	1.945E-03	.1660	4.343E-03
US 749(150)	12.01	11.00	1.396E-03	.1191	1.719E-03	.1467	1.945E-03	.1659	4.343E-03
BOT 3103(150)	12.01	11.00	1.396E-03	.1191	1.719E-03	.1467	1.945E-03	.1659	4.343E-03
NOS 7503(150)	12.01	11.00	1.396E-03	.1191	1.719E-03	.1467	1.945E-03	.1659	4.343E-03
TOP 5950(150)	13.09	12.08	1.332E-03	.1137	1.641E-03	.1401	1.856E-03	.1584	4.148E-03
BOT 3104(150)	13.09	12.08	1.332E-03	.1137	1.641E-03	.1401	1.856E-03	.1584	4.148E-03
US 750(150)	13.12	12.10	1.331E-03	.1136	1.639E-03	.1398	1.854E-03	.1582	4.140E-03
NOS 7504(150)	13.12	12.10	1.331E-03	.1136	1.639E-03	.1398	1.854E-03	.1582	4.140E-03
TOP 5951(150)	14.19	13.18	1.276E-03	.1089	1.571E-03	.1341	1.777E-03	.1517	3.971E-03
US 751(150)	14.19	13.18	1.276E-03	.1089	1.571E-03	.1341	1.777E-03	.1517	3.971E-03
BOT 3105(150)	14.19	13.18	1.276E-03	.1089	1.571E-03	.1341	1.777E-03	.1517	3.971E-03
NOS 7505(150)	14.19	13.18	1.276E-03	.1089	1.571E-03	.1341	1.777E-03	.1517	3.971E-03

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
18	1	7.90	107.9	1272	20.01	9.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
94.4	.012	.524	3760	1.067E-05	7.598E-08	5.279E 05	1.172E-02	3.684E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAP(TO)	BETA(TO)
NOP SIDE(NOS)	7371	150	80	.0505	9.559E-02	9.1696E-02
UP SIDE(US)	8410	150	80	.0505	9.559E-02	9.1696E-02
BOTTOM(BOT)	7671	150	80	.0505	9.559E-02	9.1696E-02
TOP(TOP)	7539	150	80	.0505	9.559E-02	9.1696E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5952(150)	15.29	14.28	1.225E-03	.1046	1.509E-03	.1288	1.707E-03	.1457	3.815E-03
US 752(150)	15.29	14.28	1.225E-03	.1046	1.509E-03	.1288	1.707E-03	.1457	3.815E-03
HOT 3106(150)	15.29	14.28	1.225E-03	.1046	1.509E-03	.1288	1.707E-03	.1457	3.815E-03
NOS 7506(150)	15.29	14.28	1.225E-03	.1046	1.509E-03	.1288	1.707E-03	.1457	3.815E-03
HOT 3107(150)	16.37	15.36	1.182E-03	.1008	1.455E-03	.1241	1.646E-03	.1404	3.672E-03
TOP 5953(150)	16.39	15.38	1.181E-03	.1007	1.454E-03	.1240	1.645E-03	.1403	3.673E-03
US 753(150)	16.39	15.38	1.181E-03	.1007	1.454E-03	.1240	1.645E-03	.1403	3.673E-03
NOS 7507(150)	16.39	15.38	1.181E-03	.1007	1.454E-03	.1240	1.645E-03	.1403	3.673E-03
TOP 5954(150)	17.47	16.46	1.141E-03	.0973	1.406E-03	.1199	1.590E-03	.1356	3.547E-03
US 754(150)	17.47	16.46	1.141E-03	.0973	1.406E-03	.1199	1.590E-03	.1356	3.547E-03
HOT 3108(150)	17.47	16.46	1.141E-03	.0973	1.406E-03	.1199	1.590E-03	.1356	3.547E-03
NOS 7508(150)	17.47	16.46	1.141E-03	.0973	1.406E-03	.1199	1.590E-03	.1356	3.547E-03
TOP 5955(150)	18.57	17.56	1.105E-03	.0942	1.361E-03	.1160	1.539E-03	.1313	3.434E-03
US 755(150)	18.57	17.56	1.105E-03	.0942	1.361E-03	.1160	1.539E-03	.1313	3.434E-03
HOT 3109(150)	18.57	17.56	1.105E-03	.0942	1.361E-03	.1160	1.539E-03	.1313	3.434E-03
NOS 7509(150)	18.57	17.56	1.105E-03	.0942	1.361E-03	.1160	1.539E-03	.1313	3.434E-03
HOT 3110(150)	19.65	18.64	1.073E-03	.0915	1.321E-03	.1126	1.494E-03	.1274	3.334E-03
TOP 5956(150)	19.67	18.66	1.072E-03	.0914	1.320E-03	.1126	1.493E-03	.1273	3.331E-03
US 756(150)	19.67	18.66	1.072E-03	.0914	1.320E-03	.1126	1.493E-03	.1273	3.331E-03
NOS 7510(150)	19.67	18.66	1.072E-03	.0914	1.320E-03	.1126	1.493E-03	.1273	3.331E-03
TOP 5957(150)	20.75	19.74	1.042E-03	.0888	1.284E-03	.1094	1.452E-03	.1238	3.236E-03
US 757(150)	20.75	19.74	1.042E-03	.0888	1.284E-03	.1094	1.452E-03	.1238	3.236E-03
HOT 3111(150)	20.75	19.74	1.042E-03	.0888	1.284E-03	.1094	1.452E-03	.1238	3.236E-03
NOS 7511(150)	20.75	19.74	1.042E-03	.0888	1.284E-03	.1094	1.452E-03	.1238	3.236E-03
TOP 5958(150)	21.85	20.84	1.014E-03	.0865	1.249E-03	.1065	1.413E-03	.1205	3.150E-03
US 758(150)	21.85	20.84	1.014E-03	.0865	1.249E-03	.1065	1.413E-03	.1205	3.150E-03
HOT 3112(150)	21.85	20.84	1.014E-03	.0865	1.249E-03	.1065	1.413E-03	.1205	3.150E-03
NOS 7512(150)	21.85	20.84	1.014E-03	.0865	1.249E-03	.1065	1.413E-03	.1205	3.150E-03

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VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
18	1	7.90	108.2	1272	20.01	9.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.012	.526	3761	1.049E-05	7.594E-08	5.292E 05	1.173E-02	3.679E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7371	150	80	.0505	9.559E-02	9.1696E-02
UP SIDE(US)	8410	150	80	.0505	9.559E-02	9.1696E-02
BOTTOM(BOT)	7671	150	80	.0505	9.559E-02	9.1696E-02
TOP(TOP)	7539	150	80	.0505	9.559E-02	9.1696E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 5959(150)	22.93	21.91	9.892E-04	.0843	1.218E-03	.1038	1.378E-03	.1175	3.071E-03
US 759(150)	22.93	21.91	9.892E-04	.0843	1.218E-03	.1038	1.378E-03	.1175	3.071E-03
BOT 3113(150)	22.93	21.91	9.892E-04	.0843	1.218E-03	.1038	1.378E-03	.1175	3.071E-03
NOS 7513(150)	22.93	21.91	9.892E-04	.0843	1.218E-03	.1038	1.378E-03	.1175	3.071E-03
TOP 5960(150)	24.03	23.02	9.652E-04	.0823	1.189E-03	.1014	1.345E-03	.1147	3.000E-03
US 760(150)	24.03	23.02	9.652E-04	.0823	1.189E-03	.1014	1.345E-03	.1147	3.000E-03
BOT 3114(150)	24.03	23.02	9.652E-04	.0823	1.189E-03	.1014	1.345E-03	.1147	3.000E-03
NOS 7514(150)	24.03	23.02	9.652E-04	.0823	1.189E-03	.1014	1.345E-03	.1147	3.000E-03
BOT 3115(150)	25.10	24.09	9.434E-04	.0804	1.162E-03	.0990	1.314E-03	.1120	2.926E-03
TOP 5961(150)	25.13	24.12	9.429E-04	.0804	1.161E-03	.0990	1.314E-03	.1120	2.928E-03
NOS 7515(150)	25.13	24.12	9.429E-04	.0804	1.161E-03	.0990	1.314E-03	.1120	2.928E-03
BOT 3116(150)	26.18	25.17	9.230E-04	.0786	1.137E-03	.0968	1.286E-03	.1095	2.863E-03
TOP 5962(150)	26.21	25.19	9.226E-04	.0786	1.136E-03	.0967	1.285E-03	.1094	2.859E-03
NOS 7516(150)	26.21	25.19	9.226E-04	.0786	1.136E-03	.0967	1.285E-03	.1094	2.859E-03
BOT 3117(150)	27.26	26.24	9.039E-04	.0770	1.113E-03	.0948	1.259E-03	.1073	2.804E-03
TOP 5963(150)	27.28	26.27	9.035E-04	.0770	1.113E-03	.0948	1.259E-03	.1072	2.803E-03
NOS 7517(150)	27.28	26.27	9.035E-04	.0770	1.113E-03	.0948	1.259E-03	.1072	2.803E-03
BOT 3118(150)	28.33	27.32	8.859E-04	.0755	1.091E-03	.0929	1.234E-03	.1051	2.748E-03
TOP 5964(150)	28.36	27.35	8.855E-04	.0754	1.091E-03	.0929	1.234E-03	.1051	2.747E-03
NOS 7518(150)	28.36	27.35	8.855E-04	.0754	1.091E-03	.0929	1.234E-03	.1051	2.747E-03
BOT 3119(150)	29.41	28.40	8.690E-04	.0740	1.070E-03	.0912	1.211E-03	.1031	2.696E-03
TOP 5965(150)	29.43	28.42	8.686E-04	.0740	1.070E-03	.0911	1.210E-03	.1030	2.692E-03
NOS 7519(150)	29.43	28.42	8.686E-04	.0740	1.070E-03	.0911	1.210E-03	.1030	2.692E-03
TOP 5966(150)	30.49	29.47	8.530E-04	.0726	1.050E-03	.0894	1.188E-03	.1012	2.644E-03
BOT 3120(150)	30.49	29.47	8.530E-04	.0726	1.050E-03	.0894	1.188E-03	.1012	2.644E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
18	1	7.90	108.4	1273	20.01	9.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.012	.527	3761	1.071E-05	7.600E-08	5.301E 05	1.174E-02	3.676E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7271	150	80	.0505	9.559E-02	9.1696E-02
UP SIDE(OS)	8410	150	80	.0505	9.559E-02	9.1696E-02
BOTTOM(BOT)	7671	150	80	.0505	9.559E-02	9.1696E-02
TOP(TOP)	7539	150	80	.0505	9.559E-02	9.1696E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
NOS 7520(150)	30.51	29.50	8.526E-04	.0726	1.050E-03	.0895	1.188E-03	.1012	2.645E-03
TOP 5967(150)	31.56	30.55	8.378E-04	.0714	1.032E-03	.0879	1.167E-03	.0994	2.599E-03
BOT 3121(150)	31.56	30.55	8.378E-04	.0714	1.032E-03	.0879	1.167E-03	.0994	2.599E-03
NOS 7521(150)	31.59	30.57	8.375E-04	.0713	1.031E-03	.0878	1.167E-03	.0993	2.593E-03
TOP 5968(150)	32.64	31.63	8.234E-04	.0701	1.014E-03	.0863	1.147E-03	.0976	2.550E-03
BOT 3122(150)	32.64	31.63	8.234E-04	.0701	1.014E-03	.0863	1.147E-03	.0976	2.550E-03
NOS 7522(150)	32.64	31.63	8.234E-04	.0701	1.014E-03	.0863	1.147E-03	.0976	2.550E-03
TOP 5969(150)	33.71	32.70	8.098E-04	.0690	9.972E-04	.0849	1.128E-03	.0961	2.510E-03
BOT 3123(150)	33.71	32.70	8.098E-04	.0690	9.972E-04	.0849	1.128E-03	.0961	2.510E-03
NOS 7523(150)	33.71	32.70	8.098E-04	.0690	9.972E-04	.0849	1.128E-03	.0961	2.510E-03
TOP 5970(150)	34.79	33.78	7.967E-04	.0678	9.812E-04	.0835	1.110E-03	.0945	2.467E-03
BOT 3124(150)	34.79	33.78	7.967E-04	.0678	9.812E-04	.0835	1.110E-03	.0945	2.467E-03
NOS 7524(150)	34.79	33.78	7.967E-04	.0678	9.812E-04	.0835	1.110E-03	.0945	2.467E-03
BOT 3125(150)	35.87	34.85	7.844E-04	.0668	9.659E-04	.0823	1.093E-03	.0930	2.431E-03
TOP 5971(150)	35.89	34.88	7.841E-04	.0667	9.656E-04	.0822	1.092E-03	.0930	2.428E-03
NOS 7525(150)	35.89	34.88	7.841E-04	.0667	9.656E-04	.0822	1.092E-03	.0930	2.428E-03
TOP 5972(150)	36.94	35.93	7.725E-04	.0658	9.514E-04	.0810	1.076E-03	.0916	2.394E-03
BOT 3126(150)	36.94	35.93	7.725E-04	.0658	9.514E-04	.0810	1.076E-03	.0916	2.394E-03
NOS 7526(150)	36.97	35.96	7.722E-04	.0657	9.510E-04	.0809	1.076E-03	.0916	2.391E-03
BOT 3127(150)	38.02	37.01	7.612E-04	.0648	9.374E-04	.0798	1.060E-03	.0903	2.357E-03
TOP 5973(150)	38.04	37.03	7.609E-04	.0648	9.371E-04	.0798	1.060E-03	.0903	2.358E-03
NOS 7527(150)	38.04	37.03	7.609E-04	.0648	9.371E-04	.0798	1.060E-03	.0903	2.358E-03
TOP 5974(150)	39.09	38.08	7.504E-04	.0639	9.241E-04	.0787	1.045E-03	.0890	2.326E-03
BOT 3128(150)	39.09	38.08	7.504E-04	.0639	9.241E-04	.0787	1.045E-03	.0890	2.326E-03
NOS 7528(150)	39.09	38.08	7.504E-04	.0639	9.241E-04	.0787	1.045E-03	.0890	2.326E-03

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NASA-RI OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

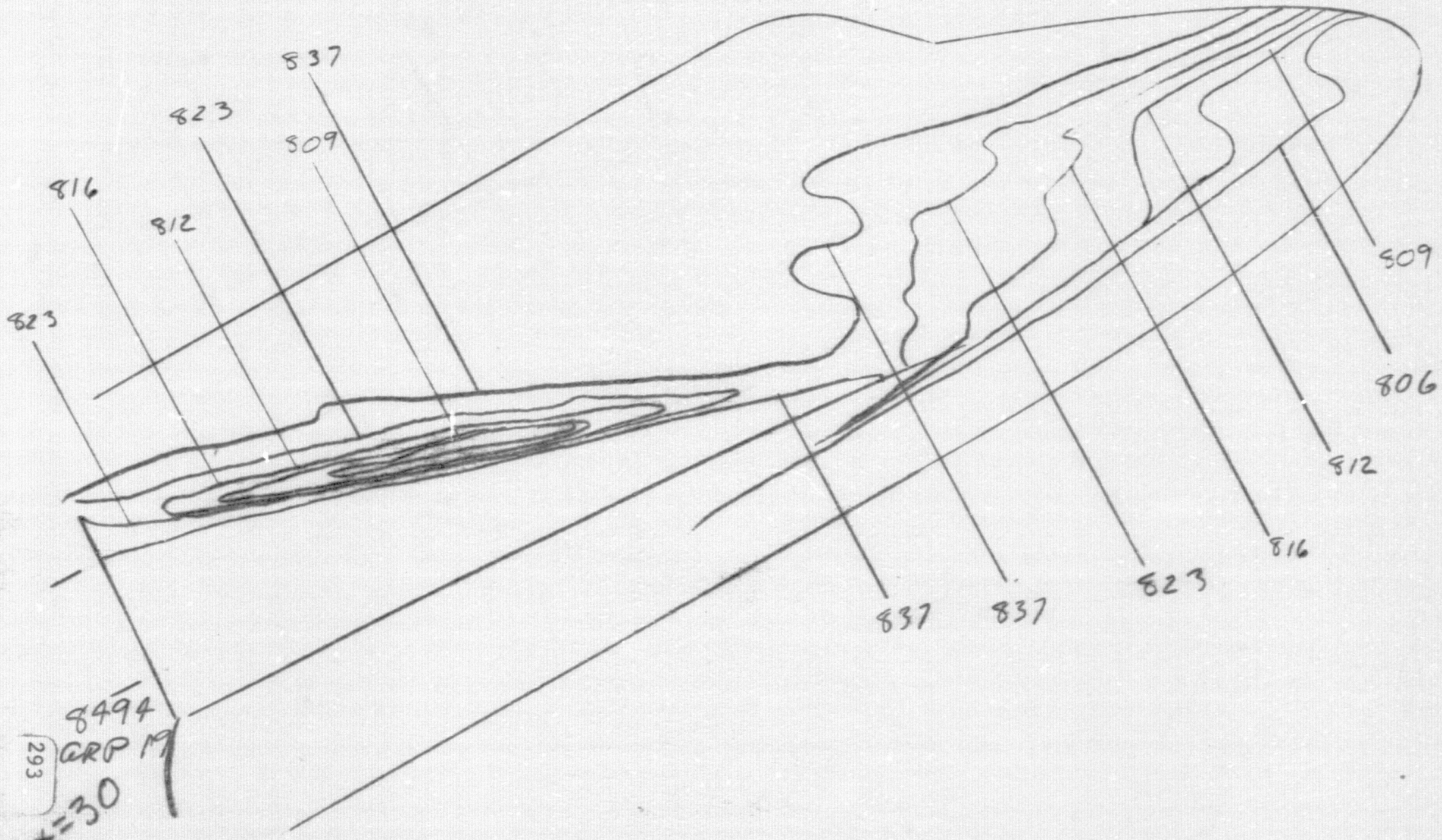
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
18	1	7.90	108.4	1273	20.01	9.99	30.00	0	0

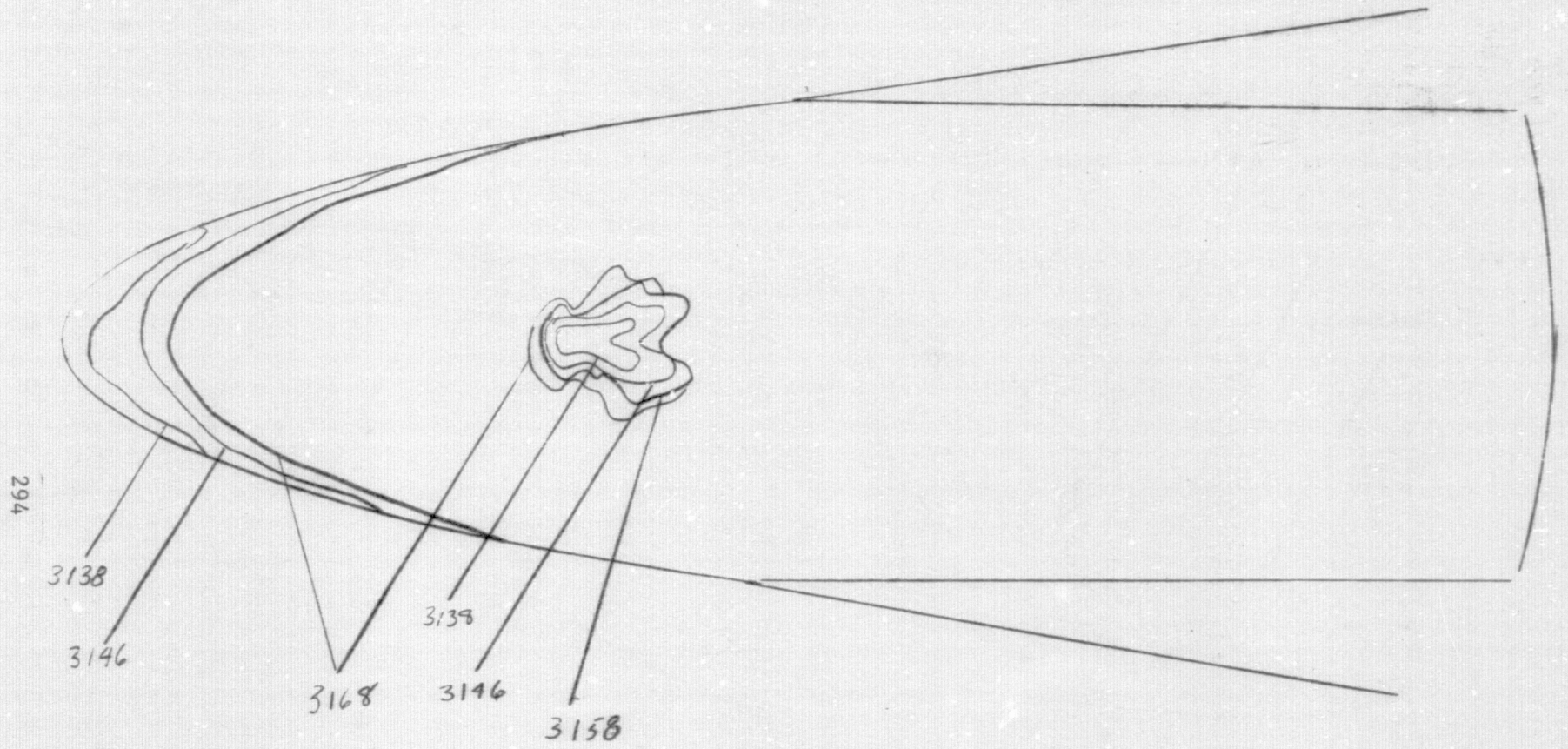
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.012	.527	3761	1.071E-05	7.600E-08	5.301E 05	1.174E-02	3.676E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7371	150	80	.0505	9.559E-02	9.1696E-02
UP SIDE(OS)	8410	150	80	.0505	9.559E-02	9.1696E-02
BOTTOM(BOT)	7671	150	80	.0505	9.559E-02	9.1696E-02
TOP(TOP)	7539	150	80	.0505	9.559E-02	9.1696E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	HI .892TO)/HREF	ST(TO)
	39.62		MODEL HAS LEFT CENTERLINE						
TOP 5975(150)	40.17	39.16	7.400E-04	.0630	9.113E-04	.0776	1.031E-03	.0877	2.291E-03
BOT 3129(150)	40.17	39.16	7.400E-04	.0630	9.113E-04	.0776	1.031E-03	.0877	2.291E-03
NOS 7529(150)	40.20	39.18	7.397E-04	.0630	9.110E-04	.0776	1.031E-03	.0878	2.293E-03
TOP 5976(150)	41.25	40.24	7.300E-04	.0622	8.990E-04	.0766	1.017E-03	.0866	2.263E-03
BOT 3130(150)	41.25	40.24	7.300E-04	.0622	8.990E-04	.0766	1.017E-03	.0866	2.263E-03
NOS 7530(150)	41.27	40.26	7.298E-04	.0621	8.987E-04	.0765	1.017E-03	.0865	2.258E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR


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NASA-RI 0H50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
19	1	7.95	211.8	1287	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.023	.995	3784	2.009E-05	7.597E-08	1.000E 06	1.621E-02	2.688E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	80	.0486	0	0
UP SIDE(US)	8494	113	80	.0486	0	0
BOTTOM(BOT)	7671	113	80	.0486	0	0
TOP(TOP)	8377	113	80	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 6001(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 801(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
BO 3131(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7531(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
BO 3132(113)	1.08		MODEL HAS NOT REACHED CENTERLINE						
TO 6002(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 802(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7532(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME = 1.80									
TOP 6003(113)	2.15	1.14	1.845E-03	.1137	2.246E-03	.1385	2.522E-03	.1555	3.031E-03
BOT 3133(113)	2.15	1.14	1.845E-03	.1137	2.246E-03	.1385	2.522E-03	.1555	3.031E-03
NOS 7533(113)	2.15	1.14	1.845E-03	.1137	2.246E-03	.1385	2.522E-03	.1555	3.031E-03
OS 803(113)	2.18	1.17	1.825E-03	.1125	2.221E-03	.1370	2.494E-03	.1538	3.000E-03
TOP 6004(113)	3.25	2.24	1.316E-03	.0811	1.602E-03	.0988	1.799E-03	.1109	2.162E-03
OS 804(113)	3.25	2.24	1.316E-03	.0811	1.602E-03	.0988	1.799E-03	.1109	2.162E-03
BOT 3134(113)	3.25	2.24	1.316E-03	.0811	1.602E-03	.0988	1.799E-03	.1109	2.162E-03
NOS 7534(113)	3.25	2.24	1.316E-03	.0811	1.602E-03	.0988	1.799E-03	.1109	2.162E-03
TOP 6005(113)	4.33	3.32	1.082E-03	.0667	1.317E-03	.0812	1.479E-03	.0912	1.778E-03
OS 805(113)	4.33	3.32	1.082E-03	.0667	1.317E-03	.0812	1.479E-03	.0912	1.778E-03
BOT 3135(113)	4.33	3.32	1.082E-03	.0667	1.317E-03	.0812	1.479E-03	.0912	1.778E-03
NOS 7535(113)	4.33	3.32	1.082E-03	.0667	1.317E-03	.0812	1.479E-03	.0912	1.778E-03
TOP 6006(113)	5.41	4.39	9.399E-04	.0579	1.144E-03	.0705	1.285E-03	.0792	1.544E-03
OS 806(113)	5.41	4.39	9.399E-04	.0579	1.144E-03	.0705	1.285E-03	.0792	1.544E-03
BOT 3136(113)	5.41	4.39	9.399E-04	.0579	1.144E-03	.0705	1.285E-03	.0792	1.544E-03
NOS 7536(113)	5.41	4.39	9.399E-04	.0579	1.144E-03	.0705	1.285E-03	.0792	1.544E-03
BOT 3137(113)	6.48	5.47	8.424E-04	.0519	1.025E-03	.0632	1.151E-03	.0710	1.384E-03

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NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
19	1	7.95	212.0	1287	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.023	1.000	3784	2.010E-05	7.597E-08	1.001E 06	1.622E-02	2.686E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAR)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7371	113	80	.0486	4.417E-02	4.0541E-02
UP SIDE(US)	8494	113	80	.0486	4.417E-02	4.0541E-02
BOTTOM(BOT)	7671	113	80	.0486	4.417E-02	4.0541E-02
TOP(TOP)	8377	113	80	.0486	4.417E-02	4.0541E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6007(113)	6.51	5.50	8.405E-04	.0518	1.023E-03	.0631	1.149E-03	.0708	1.381E-03
US 807(113)	6.51	5.50	8.405E-04	.0518	1.023E-03	.0631	1.149E-03	.0708	1.381E-03
NOS 7537(113)	6.51	5.50	8.405E-04	.0518	1.023E-03	.0631	1.149E-03	.0708	1.381E-03
TOP 6008(113)	7.58	6.57	7.686E-04	.0474	9.356E-04	.0577	1.051E-03	.0648	1.263E-03
US 808(113)	7.58	6.57	7.686E-04	.0474	9.356E-04	.0577	1.051E-03	.0648	1.263E-03
HOT 3138(113)	7.58	6.57	7.686E-04	.0474	9.356E-04	.0577	1.051E-03	.0648	1.263E-03
NOS 7538(113)	7.58	6.57	7.686E-04	.0474	9.356E-04	.0577	1.051E-03	.0648	1.263E-03
TOP 6009(113)	8.66	7.65	7.124E-04	.0439	8.673E-04	.0535	9.739E-04	.0601	1.171E-03
US 809(113)	8.66	7.65	7.124E-04	.0439	8.673E-04	.0535	9.739E-04	.0601	1.171E-03
HOT 3139(113)	8.66	7.65	7.124E-04	.0439	8.673E-04	.0535	9.739E-04	.0601	1.171E-03
NOS 7539(113)	8.66	7.65	7.124E-04	.0439	8.673E-04	.0535	9.739E-04	.0601	1.171E-03
OS 810(113)	9.74	8.72	6.670E-04	.0411	8.120E-04	.0501	9.118E-04	.0562	1.096E-03
HOT 3140(113)	9.74	8.72	6.670E-04	.0411	8.120E-04	.0501	9.118E-04	.0562	1.096E-03
TOP 6010(113)	9.76	8.75	6.661E-04	.0411	8.109E-04	.0500	9.105E-04	.0561	1.095E-03
NOS 7540(113)	9.76	8.75	6.661E-04	.0411	8.109E-04	.0500	9.105E-04	.0561	1.095E-03
TOP 6011(113)	10.84	9.83	6.286E-04	.0388	7.652E-04	.0472	8.592E-04	.0530	1.033E-03
OS 811(113)	10.84	9.83	6.286E-04	.0388	7.652E-04	.0472	8.592E-04	.0530	1.033E-03
HOT 3141(113)	10.84	9.83	6.286E-04	.0388	7.652E-04	.0472	8.592E-04	.0530	1.033E-03
NOS 7541(113)	10.84	9.83	6.286E-04	.0388	7.652E-04	.0472	8.592E-04	.0530	1.033E-03
TOP 6012(113)	11.91	10.90	5.967E-04	.0368	7.264E-04	.0448	8.157E-04	.0503	9.810E-04
OS 812(113)	11.91	10.90	5.967E-04	.0368	7.264E-04	.0448	8.157E-04	.0503	9.810E-04
HOT 3142(113)	11.91	10.90	5.967E-04	.0368	7.264E-04	.0448	8.157E-04	.0503	9.810E-04
NOS 7542(113)	11.91	10.90	5.967E-04	.0368	7.264E-04	.0448	8.157E-04	.0503	9.810E-04
HOT 3143(113)	12.99	11.98	5.693E-04	.0351	6.930E-04	.0427	7.782E-04	.0480	9.360E-04
TOP 6013(113)	13.01	12.00	5.687E-04	.0351	6.923E-04	.0427	7.774E-04	.0479	9.350E-04
OS 813(113)	13.01	12.00	5.687E-04	.0351	6.923E-04	.0427	7.774E-04	.0479	9.350E-04
NOS 7543(113)	13.01	12.00	5.687E-04	.0351	6.923E-04	.0427	7.774E-04	.0479	9.350E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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NASA-RI OHS0

VAS26

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
19	1	7.95	211.3	1287	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.023	1.000	3784	2.009E-05	7.597E-08	1.901E 06	1.622E-02	2.687E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	80	.0486	4.417E-02	4.0541E-02
UP SIDE(OS)	8494	113	80	.0486	4.417E-02	4.0541E-02
BOTTOM(BOT)	7671	113	80	.0486	4.417E-02	4.0541E-02
TOP(TOP)	8377	113	80	.0486	4.417E-02	4.0541E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6014(113)	14.09	13.08	5.448E-04	.0336	6.632E-04	.0409	7.447E-04	.0459	8.948E-04
OS 814(113)	14.09	13.08	5.448E-04	.0336	6.632E-04	.0409	7.447E-04	.0459	8.948E-04
HOT 3144(113)	14.09	13.08	5.448E-04	.0336	6.632E-04	.0409	7.447E-04	.0459	8.948E-04
NOS 7544(113)	14.09	13.08	5.448E-04	.0336	6.632E-04	.0409	7.447E-04	.0459	8.948E-04
TOP 6015(113)	15.17	14.16	5.237E-04	.0323	6.375E-04	.0393	7.158E-04	.0441	8.601E-04
OS 815(113)	15.17	14.16	5.237E-04	.0323	6.375E-04	.0393	7.158E-04	.0441	8.601E-04
HOT 3145(113)	15.17	14.16	5.237E-04	.0323	6.375E-04	.0393	7.158E-04	.0441	8.601E-04
NOS 7545(113)	15.17	14.16	5.237E-04	.0323	6.375E-04	.0393	7.158E-04	.0441	8.601E-04
HOT 3146(113)	16.24	15.23	5.048E-04	.0311	6.146E-04	.0379	6.901E-04	.0425	8.296E-04
TOP 6016(113)	16.27	15.26	5.044E-04	.0311	6.141E-04	.0379	6.895E-04	.0425	8.289E-04
OS 816(113)	16.27	15.26	5.044E-04	.0311	6.141E-04	.0379	6.895E-04	.0425	8.289E-04
NOS 7546(113)	16.27	15.26	5.044E-04	.0311	6.141E-04	.0379	6.895E-04	.0425	8.289E-04
TOP 6017(113)	17.34	16.33	4.875E-04	.0301	5.935E-04	.0366	6.664E-04	.0411	8.011E-04
OS 817(113)	17.34	16.33	4.875E-04	.0301	5.935E-04	.0366	6.664E-04	.0411	8.011E-04
HOT 3147(113)	17.34	16.33	4.875E-04	.0301	5.935E-04	.0366	6.664E-04	.0411	8.011E-04
NOS 7547(113)	17.34	16.33	4.875E-04	.0301	5.935E-04	.0366	6.664E-04	.0411	8.011E-04
TOP 6018(113)	18.42	17.41	4.722E-04	.0291	5.748E-04	.0354	6.455E-04	.0398	7.756E-04
OS 818(113)	18.42	17.41	4.722E-04	.0291	5.748E-04	.0354	6.455E-04	.0398	7.756E-04
HOT 3148(113)	18.42	17.41	4.722E-04	.0291	5.748E-04	.0354	6.455E-04	.0398	7.756E-04
NOS 7548(113)	18.42	17.41	4.722E-04	.0291	5.748E-04	.0354	6.455E-04	.0398	7.756E-04
TOP 6019(113)	19.50	18.49	4.583E-04	.0283	5.579E-04	.0344	6.264E-04	.0386	7.530E-04
OS 819(113)	19.50	18.49	4.583E-04	.0283	5.579E-04	.0344	6.264E-04	.0386	7.530E-04
HOT 3149(113)	19.50	18.49	4.583E-04	.0283	5.579E-04	.0344	6.264E-04	.0386	7.530E-04
NOS 7549(113)	19.50	18.49	4.583E-04	.0283	5.579E-04	.0344	6.264E-04	.0386	7.530E-04
TOP 6020(113)	20.57	19.56	4.455E-04	.0275	5.423E-04	.0334	6.089E-04	.0375	7.317E-04
OS 820(113)	20.57	19.56	4.455E-04	.0275	5.423E-04	.0334	6.089E-04	.0375	7.317E-04

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NASA-RI OH50

VAS26

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
19	1	7.95	212.1	1287	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.023	1.001	3784	2.012E-05	7.397E-08	1.002E 06	1.422E-02	2.686E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	80	.0486	4.417E-02	4.0541E-02
OP SIDE(OS)	8494	113	80	.0486	4.417E-02	4.0541E-02
BOTTOM(BOT)	7671	113	80	.0486	4.417E-02	4.0541E-02
TOP(TOP)	8377	113	80	.0486	4.417E-02	4.0541E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
BOT 3150(113)	20.60	19.59	4.452E-04	.0274	5.420E-04	.0334	6.086E-04	.0375	7.312E-04
NOS 7550(113)	20.60	19.59	4.452E-04	.0274	5.420E-04	.0334	6.086E-04	.0375	7.312E-04
TOP 8021(113)	21.67	20.66	4.334E-04	.0267	5.277E-04	.0325	5.925E-04	.0365	7.119E-04
OS 821(113)	21.67	20.66	4.334E-04	.0267	5.277E-04	.0325	5.925E-04	.0365	7.119E-04
BOT 3151(113)	21.67	20.66	4.334E-04	.0267	5.277E-04	.0325	5.925E-04	.0365	7.119E-04
NOS 7551(113)	21.67	20.66	4.334E-04	.0267	5.277E-04	.0325	5.925E-04	.0365	7.119E-04
TOP 8022(113)	22.75	21.74	4.226E-04	.0260	5.144E-04	.0317	5.776E-04	.0356	6.937E-04
OS 822(113)	22.75	21.74	4.226E-04	.0260	5.144E-04	.0317	5.776E-04	.0356	6.937E-04
BOT 3152(113)	22.75	21.74	4.226E-04	.0260	5.144E-04	.0317	5.776E-04	.0356	6.937E-04
NOS 7552(113)	22.75	21.74	4.226E-04	.0260	5.144E-04	.0317	5.776E-04	.0356	6.937E-04
TOP 8023(113)	23.83	22.82	4.125E-04	.0254	5.021E-04	.0310	5.639E-04	.0348	6.775E-04
BOT 3153(113)	23.83	22.82	4.125E-04	.0254	5.021E-04	.0310	5.639E-04	.0348	6.775E-04
OS 823(113)	23.85	22.84	4.123E-04	.0254	5.019E-04	.0309	5.635E-04	.0347	6.768E-04
NOS 7553(113)	23.85	22.84	4.123E-04	.0254	5.019E-04	.0309	5.635E-04	.0347	6.768E-04
TOP 8024(113)	24.93	23.92	4.029E-04	.0248	4.904E-04	.0302	5.507E-04	.0340	6.620E-04
OS 824(113)	24.93	23.92	4.029E-04	.0248	4.904E-04	.0302	5.507E-04	.0340	6.620E-04
BOT 3154(113)	24.93	23.92	4.029E-04	.0248	4.904E-04	.0302	5.507E-04	.0340	6.620E-04
NOS 7554(113)	24.93	23.92	4.029E-04	.0248	4.904E-04	.0302	5.507E-04	.0340	6.620E-04
TOP 8025(113)	26.00	24.99	3.941E-04	.0243	4.798E-04	.0296	5.387E-04	.0332	6.473E-04
OS 825(113)	26.00	24.99	3.941E-04	.0243	4.798E-04	.0296	5.387E-04	.0332	6.473E-04
BOT 3155(113)	26.00	24.99	3.941E-04	.0243	4.798E-04	.0296	5.387E-04	.0332	6.473E-04
NOS 7555(113)	26.00	24.99	3.941E-04	.0243	4.798E-04	.0296	5.387E-04	.0332	6.473E-04
TOP 8026(113)	27.08	26.07	3.859E-04	.0238	4.698E-04	.0290	5.275E-04	.0325	6.341E-04
OS 826(113)	27.08	26.07	3.859E-04	.0238	4.698E-04	.0290	5.275E-04	.0325	6.341E-04
BOT 3156(113)	27.08	26.07	3.859E-04	.0238	4.698E-04	.0290	5.275E-04	.0325	6.341E-04
NOS 7556(113)	27.08	26.07	3.859E-04	.0238	4.698E-04	.0290	5.275E-04	.0325	6.341E-04

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NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
19	1	7.95	212.0	1287	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.023	1.000	3764	2.011E-05	7.596E-08	1.002E 06	1.622E-02	2.686E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	80	.0486	4.417E-02	4.0541E-02
OP SIDE(OS)	8494	113	80	.0486	4.417E-02	4.0541E-02
BOTTOM(BOT)	7671	113	80	.0486	4.417E-02	4.0541E-02
TOP(TOP)	8377	113	80	.0486	4.417E-02	4.0541E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
HOT 3157(113)	28.16	27.15	3.782E-04	.0233	4.604E-04	.0284	5.169E-04	.0319	6.211E-04
TOP 6027(113)	28.18	27.17	3.780E-04	.0233	4.601E-04	.0284	5.167E-04	.0319	6.208E-04
OS 827(113)	28.18	27.17	3.780E-04	.0233	4.601E-04	.0284	5.167E-04	.0319	6.208E-04
NOS 7557(113)	28.18	27.17	3.780E-04	.0233	4.601E-04	.0284	5.167E-04	.0319	6.208E-04
TOP 6028(113)	29.26	28.25	3.707E-04	.0229	4.513E-04	.0278	5.068E-04	.0312	6.091E-04
OS 828(113)	29.26	28.25	3.707E-04	.0229	4.513E-04	.0278	5.068E-04	.0312	6.091E-04
HOT 3158(113)	29.26	28.25	3.707E-04	.0229	4.513E-04	.0278	5.068E-04	.0312	6.091E-04
NOS 7558(113)	29.26	28.25	3.707E-04	.0229	4.513E-04	.0278	5.068E-04	.0312	6.091E-04
OS 829(113)	30.33	29.32	3.638E-04	.0224	4.429E-04	.0273	4.974E-04	.0307	5.973E-04
HOT 3159(113)	30.33	29.32	3.638E-04	.0224	4.429E-04	.0273	4.974E-04	.0307	5.973E-04
NOS 7559(113)	30.33	29.32	3.638E-04	.0224	4.429E-04	.0273	4.974E-04	.0307	5.973E-04
TOP 6029(113)	30.36	29.35	3.637E-04	.0224	4.427E-04	.0273	4.972E-04	.0306	5.973E-04
TOP 6030(113)	31.41	30.40	3.574E-04	.0220	4.350E-04	.0268	4.885E-04	.0301	5.872E-04
OS 830(113)	31.41	30.40	3.574E-04	.0220	4.350E-04	.0268	4.885E-04	.0301	5.872E-04
HOT 3160(113)	31.41	30.40	3.574E-04	.0220	4.350E-04	.0268	4.885E-04	.0301	5.872E-04
NOS 7560(113)	31.44	30.42	3.572E-04	.0220	4.348E-04	.0268	4.883E-04	.0301	5.864E-04
TOP 6031(113)	32.51	31.50	3.510E-04	.0216	4.274E-04	.0263	4.799E-04	.0296	5.768E-04
OS 831(113)	32.51	31.50	3.510E-04	.0216	4.274E-04	.0263	4.799E-04	.0296	5.768E-04
HOT 3161(113)	32.51	31.50	3.510E-04	.0216	4.274E-04	.0263	4.799E-04	.0296	5.768E-04
NOS 7561(113)	32.51	31.50	3.510E-04	.0216	4.274E-04	.0263	4.799E-04	.0296	5.768E-04
TOP 6032(113)	33.59	32.58	3.452E-04	.0213	4.202E-04	.0259	4.719E-04	.0291	5.670E-04
OS 832(113)	33.59	32.58	3.452E-04	.0213	4.202E-04	.0259	4.719E-04	.0291	5.670E-04
HOT 3162(113)	33.59	32.58	3.452E-04	.0213	4.202E-04	.0259	4.719E-04	.0291	5.670E-04
NOS 7562(113)	33.59	32.58	3.452E-04	.0213	4.202E-04	.0259	4.719E-04	.0291	5.670E-04
HOT 3163(113)	34.66	33.65	3.396E-04	.0209	4.135E-04	.0255	4.643E-04	.0286	5.578E-04

3/29/74

NASA-RI 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
19	1	7.95	212.1	1287	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
94.3	.023	1.001	3784	2.012E-05	7.595E-08	1.002E 06	1.622E-02	2.685E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7371	113	80	.0486	4.417E-02	4.0541E-02
UP SIDE(US)	8494	113	80	.0486	4.417E-02	4.0541E-02
BOTTOM(BOT)	7671	113	80	.0486	4.417E-02	4.0541E-02
TOP(TOP)	8377	113	80	.0486	4.417E-02	4.0541E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6033(113)	34.69	33.68	3.395E-04	.0209	4.133E-04	.0255	4.641E-04	.0286	5.576E-04
US 833(113)	34.69	33.68	3.395E-04	.0209	4.133E-04	.0255	4.641E-04	.0286	5.576E-04
NOS 7563(113)	34.69	33.68	3.395E-04	.0209	4.133E-04	.0255	4.641E-04	.0286	5.576E-04
TOP 6034(113)	35.77	34.75	3.342E-04	.0206	4.069E-04	.0251	4.569E-04	.0282	5.486E-04
US 834(113)	35.77	34.75	3.342E-04	.0206	4.069E-04	.0251	4.569E-04	.0282	5.486E-04
HOT 3164(113)	35.77	34.75	3.342E-04	.0206	4.069E-04	.0251	4.569E-04	.0282	5.486E-04
NOS 7564(113)	35.77	34.75	3.342E-04	.0206	4.069E-04	.0251	4.569E-04	.0282	5.486E-04
TOP 6035(113)	36.84	35.83	3.292E-04	.0203	4.007E-04	.0247	4.499E-04	.0277	5.406E-04
US 835(113)	36.84	35.83	3.292E-04	.0203	4.007E-04	.0247	4.499E-04	.0277	5.406E-04
HOT 3165(113)	36.84	35.83	3.292E-04	.0203	4.007E-04	.0247	4.499E-04	.0277	5.406E-04
NOS 7565(113)	36.84	35.83	3.292E-04	.0203	4.007E-04	.0247	4.499E-04	.0277	5.406E-04
HOT 3166(113)	37.92	36.91	3.243E-04	.0200	3.948E-04	.0243	4.433E-04	.0273	5.323E-04
TOP 6036(113)	37.94	36.93	3.242E-04	.0200	3.947E-04	.0243	4.432E-04	.0273	5.324E-04
US 836(113)	37.94	36.93	3.242E-04	.0200	3.947E-04	.0243	4.432E-04	.0273	5.324E-04
NOS 7566(113)	37.94	36.93	3.242E-04	.0200	3.947E-04	.0243	4.432E-04	.0273	5.324E-04
TOP 6037(113)	39.02	38.01	3.196E-04	.0197	3.891E-04	.0240	4.369E-04	.0269	5.246E-04
US 837(113)	39.02	38.01	3.196E-04	.0197	3.891E-04	.0240	4.369E-04	.0269	5.246E-04
HOT 3167(113)	39.02	38.01	3.196E-04	.0197	3.891E-04	.0240	4.369E-04	.0269	5.246E-04
NOS 7567(113)	39.02	38.01	3.196E-04	.0197	3.891E-04	.0240	4.369E-04	.0269	5.246E-04
	39.80		MODEL WAS LEFT CENTERLINE						
TOP 6038(113)	40.10	39.08	3.152E-04	.0194	3.837E-04	.0237	4.308E-04	.0266	5.178E-04
US 838(113)	40.10	39.08	3.152E-04	.0194	3.837E-04	.0237	4.308E-04	.0266	5.178E-04
HOT 3169(113)	40.10	39.08	3.152E-04	.0194	3.837E-04	.0237	4.308E-04	.0266	5.178E-04
NOS 7568(113)	40.10	39.08	3.152E-04	.0194	3.837E-04	.0237	4.308E-04	.0266	5.178E-04
HOT 3169(113)	41.17	40.16	3.109E-04	.0192	3.785E-04	.0233	4.250E-04	.0262	5.104E-04

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3/29/74

NASA-RI OH50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VA52E — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
19	1	7.95	212.2	1287	30.01	-.01	30.00	0	0

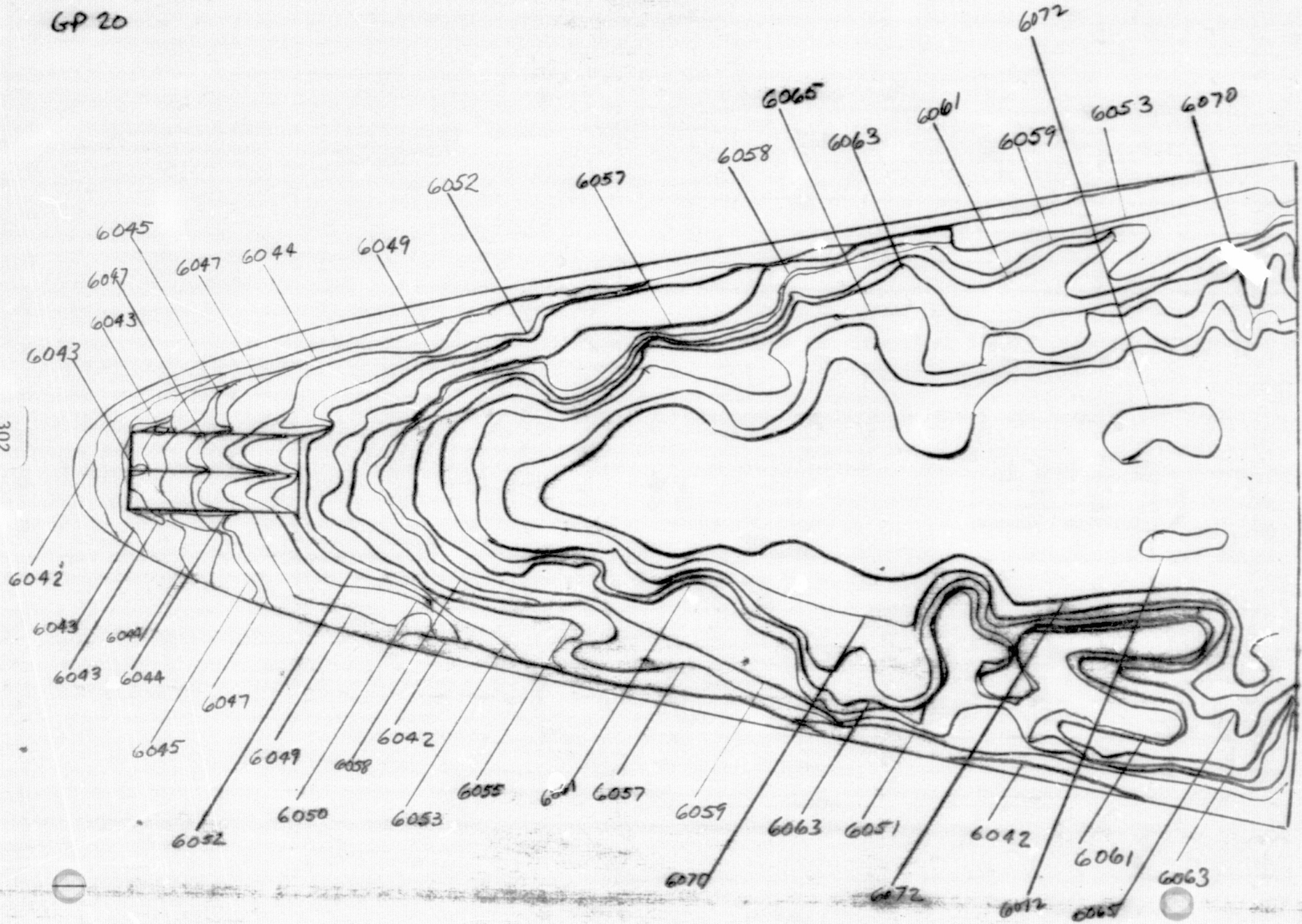
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.023	1.001	3784	2.013E-05	7.596E-08	1.003E 06	1.623E-02	2.685E-02

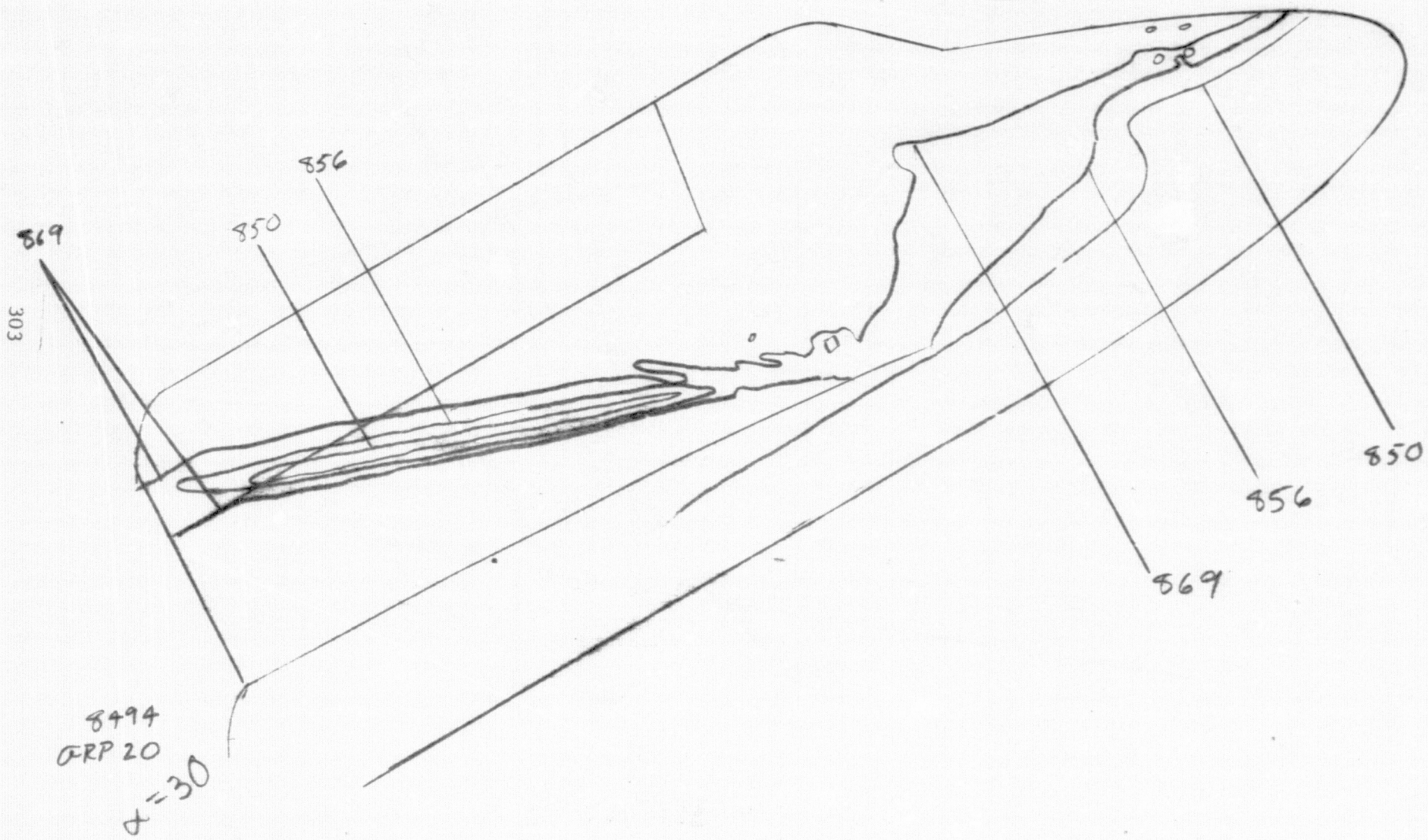
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	80	.0486	4.417E-02	4.0541E-02
UP SIDE(OS)	8494	113	80	.0486	4.417E-02	4.0541E-02
BOTTOM(BOT)	7671	113	80	.0486	4.417E-02	4.0541E-02
TOP(TOP)	8377	113	80	.0486	4.417E-02	4.0541E-02

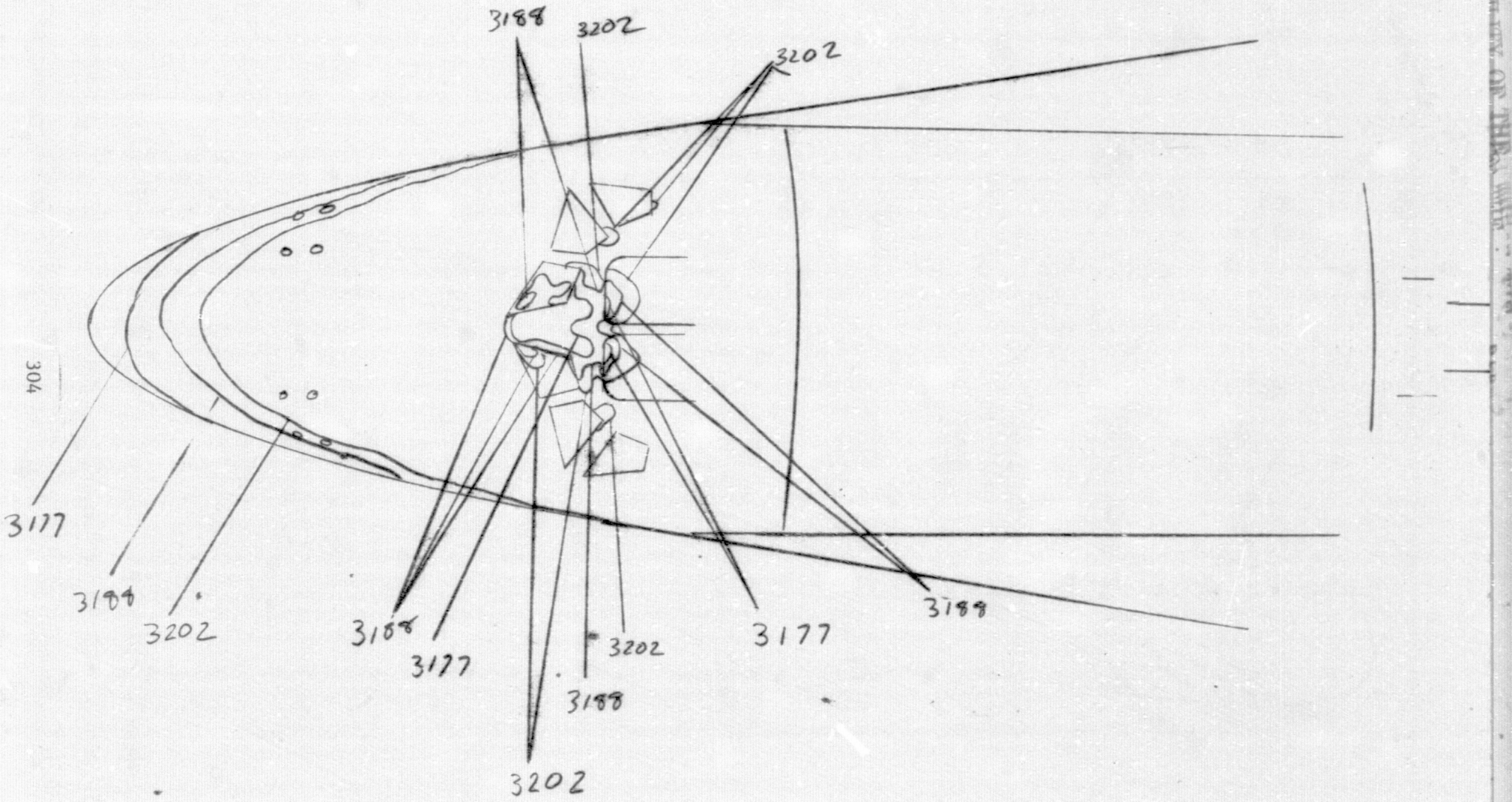
PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TC)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6039(113)	41.20	40.19	3.108E-04	.0192	3.784E-04	.0233	4.249E-04	.0262	5.102E-04
OS 839(113)	41.20	40.19	3.108E-04	.0192	3.784E-04	.0233	4.249E-04	.0262	5.102E-04
NOS 7569(113)	41.20	40.19	3.108E-04	.0192	3.784E-04	.0233	4.249E-04	.0262	5.102E-04

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GP 20

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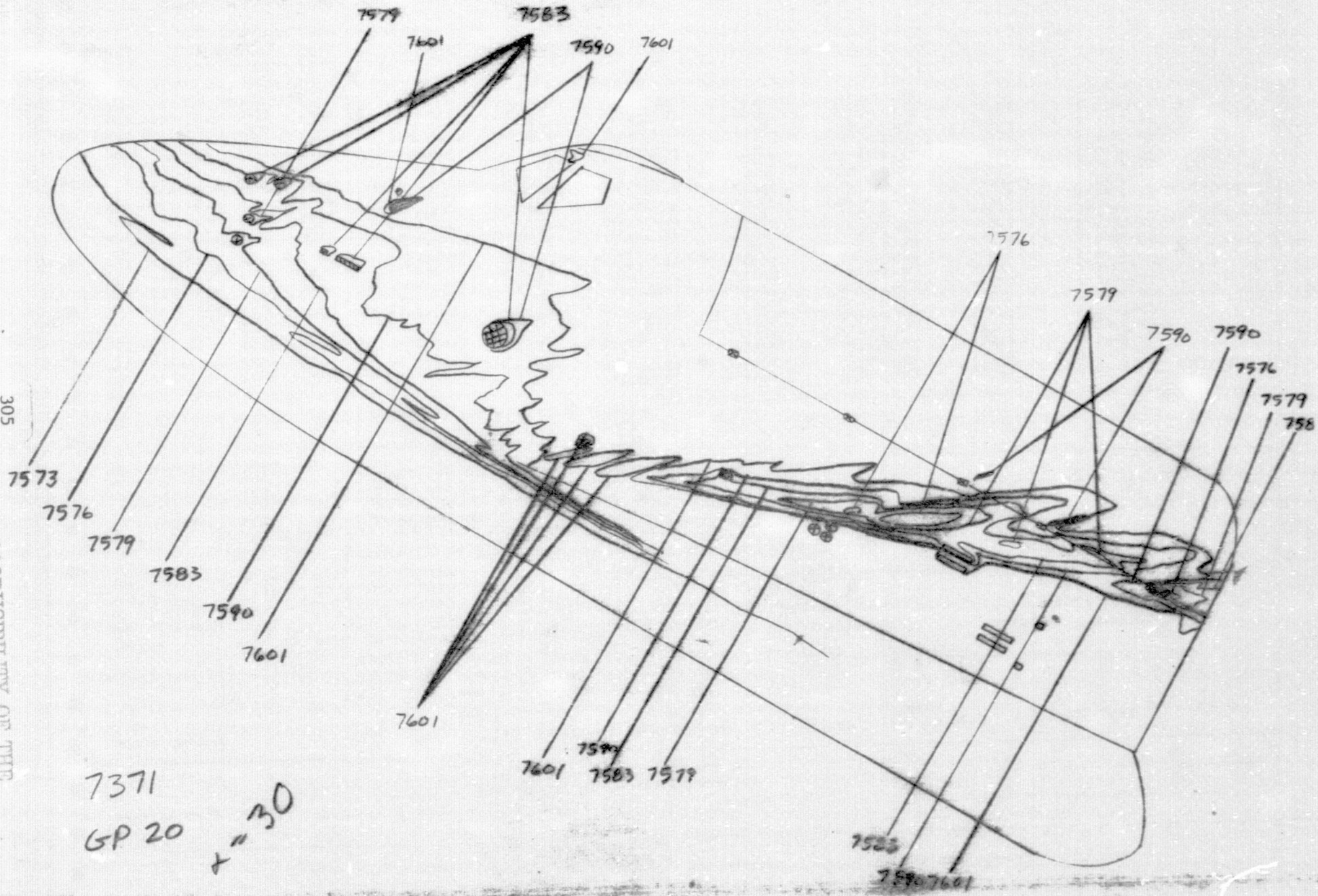



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3/29/74

NASA-RI 0H50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VAS26 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
20	1	7.95	213.7	1272	29.97	.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	1.008	3762	2.050E-05	7.510E-08	1.027E 06	1.625E-02	2.657E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7371	113	77	.0486	0	0
OP SIDE(OS)	8494	113	77	.0486	0	0
BOTTOM(BOT)	7671	113	77	.0486	0	0
TOP(TOP)	8377	169	77	.0515	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 6040(169)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 842(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
BO 3170(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7570(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 6041(169)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 841(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 3171(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7571(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 6042(169)	2.18	1.17	5.875E-03	.3616	7.278E-03	.4479	8.266E-03	.5087	9.504E-03
OS 842(113)	2.18	1.17	2.031E-03	.1250	2.479E-03	.1526	2.783E-03	.1713	3.296E-03
BOT 3172(113)	2.18	1.17	2.031E-03	.1250	2.479E-03	.1526	2.783E-03	.1713	3.296E-03
NOS 7572(113)	2.18	1.17	2.031E-03	.1250	2.479E-03	.1526	2.783E-03	.1713	3.296E-03
TOP 6043(169)	3.25	2.24	4.236E-03	.2607	5.248E-03	.3229	5.960E-03	.3667	6.850E-03
OS 843(113)	3.25	2.24	1.464E-03	.0901	1.788E-03	.1100	2.007E-03	.1235	2.375E-03
BOT 3173(113)	3.25	2.24	1.464E-03	.0901	1.788E-03	.1100	2.007E-03	.1235	2.375E-03
NOS 7573(113)	3.25	2.24	1.464E-03	.0901	1.788E-03	.1100	2.007E-03	.1235	2.375E-03
OS 844(113)	4.33	3.32	1.204E-03	.0741	1.469E-03	.0904	1.650E-03	.1015	1.953E-03
BOT 3174(113)	4.33	3.32	1.204E-03	.0741	1.469E-03	.0904	1.650E-03	.1015	1.953E-03
TOP 6044(169)	4.36	3.34	3.469E-03	.2135	4.297E-03	.2644	4.881E-03	.3003	5.610E-03
NOS 7574(113)	4.36	3.34	1.199E-03	.0738	1.464E-03	.0901	1.643E-03	.1011	1.945E-03
TOP 6045(169)	5.43	4.42	3.017E-03	.1857	3.738E-03	.2300	4.245E-03	.2613	4.881E-03
OS 845(113)	5.43	4.42	1.043E-03	.0642	1.273E-03	.0784	1.429E-03	.0880	1.693E-03
BOT 3175(113)	5.43	4.42	1.043E-03	.0642	1.273E-03	.0784	1.429E-03	.0880	1.693E-03
NOS 7575(113)	5.43	4.42	1.043E-03	.0642	1.273E-03	.0784	1.429E-03	.0880	1.693E-03
TOP 6046(169)	6.51	5.50	2.706E-03	.1664	3.352E-03	.2062	3.807E-03	.2342	4.373E-03
OS 846(113)	6.51	5.50	9.353E-04	.0575	1.142E-03	.0702	1.282E-03	.0788	1.516E-03
BOT 3176(113)	6.51	5.50	9.353E-04	.0575	1.142E-03	.0702	1.282E-03	.0788	1.516E-03
NOS 7576(113)	6.51	5.50	9.353E-04	.0575	1.142E-03	.0702	1.282E-03	.0788	1.516E-03

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
20	1	7.95	213.8	1272	29.97	.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	1.009	3762	2.051E-05	7.510E-08	1.028E 06	1.676E-02	2.656E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7271	113	77	.0486	4.896E-02	4.5118E-02
UP SIDE(US)	8494	113	77	.0486	4.896E-02	4.5118E-02
BOTTOM(BOT)	7671	113	77	.0486	4.896E-02	4.5118E-02
TOP(TOP)	8377	169	77	.0515	1.251E-01	1.2317E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
BOT 3177(113)	7.58	6.57	8.553E-04	.0526	1.044E-03	.0642	1.172E-03	.0721	1.387E-03
TOP 6047(169)	7.61	6.60	2.470E-03	.1519	3.059E-03	.1882	3.475E-03	.2137	3.992E-03
US 848(113)	7.61	6.60	8.537E-04	.0525	1.042E-03	.0641	1.170E-03	.0720	1.384E-03
NOS 7577(113)	7.61	6.60	8.537E-04	.0525	1.042E-03	.0641	1.170E-03	.0720	1.384E-03
TOP 6048(169)	8.68	7.67	2.290E-03	.1409	2.837E-03	.1745	3.222E-03	.1982	3.703E-03
US 848(113)	8.68	7.67	7.916E-04	.0487	9.663E-04	.0595	1.085E-03	.0667	1.284E-03
BOT 3178(113)	8.68	7.67	7.916E-04	.0487	9.663E-04	.0595	1.085E-03	.0667	1.284E-03
NOS 7578(113)	8.68	7.67	7.916E-04	.0487	9.663E-04	.0595	1.085E-03	.0667	1.284E-03
BOT 3179(113)	9.76	8.75	7.413E-04	.0456	9.049E-04	.0557	1.016E-03	.0625	1.202E-03
TOP 6049(169)	9.79	8.77	2.141E-03	.1318	2.653E-03	.1632	3.013E-03	.1854	3.463E-03
US 849(113)	9.79	8.77	7.402E-04	.0455	9.036E-04	.0556	1.014E-03	.0624	1.201E-03
NOS 7579(113)	9.79	8.77	7.402E-04	.0455	9.036E-04	.0556	1.014E-03	.0624	1.201E-03
TOP 6050(169)	10.86	9.85	2.021E-03	.1244	2.504E-03	.1540	2.843E-03	.1750	3.268E-03
US 850(113)	10.86	9.85	6.986E-04	.0430	8.528E-04	.0525	9.574E-04	.0589	1.133E-03
BOT 3180(113)	10.86	9.85	6.986E-04	.0430	8.528E-04	.0525	9.574E-04	.0589	1.133E-03
NOS 7580(113)	10.86	9.85	6.986E-04	.0430	8.528E-04	.0525	9.574E-04	.0589	1.133E-03
TOP 6051(169)	11.94	10.93	1.919E-03	.1181	2.377E-03	.1463	2.700E-03	.1661	3.103E-03
US 851(113)	11.94	10.93	6.633E-04	.0408	8.097E-04	.0498	9.090E-04	.0559	1.076E-03
BOT 3181(113)	11.94	10.93	6.633E-04	.0408	8.097E-04	.0498	9.090E-04	.0559	1.076E-03
NOS 7581(113)	11.94	10.93	6.633E-04	.0408	8.097E-04	.0498	9.090E-04	.0559	1.076E-03
TOP 6052(169)	13.04	12.03	1.829E-03	.1125	2.266E-03	.1394	2.573E-03	.1583	2.958E-03
US 852(113)	13.04	12.03	6.322E-04	.0389	7.718E-04	.0475	8.664E-04	.0533	1.026E-03
BOT 3182(113)	13.04	12.03	6.322E-04	.0389	7.718E-04	.0475	8.664E-04	.0533	1.026E-03
NOS 7582(113)	13.04	12.03	6.322E-04	.0389	7.718E-04	.0475	8.664E-04	.0533	1.026E-03
TOP 6053(169)	14.12	13.10	1.752E-03	.1078	2.171E-03	.1336	2.465E-03	.1517	2.835E-03
US 853(113)	14.12	13.10	6.057E-04	.0373	7.394E-04	.0455	8.300E-04	.0511	9.830E-04
BOT 3183(113)	14.12	13.10	6.057E-04	.0373	7.394E-04	.0455	8.300E-04	.0511	9.830E-04
NOS 7583(113)	14.12	13.10	6.057E-04	.0373	7.394E-04	.0455	8.300E-04	.0511	9.830E-04

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NASA-RI OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
20	1	7.95	213.6	1272.	29.97	.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	1.018	3762	2.049E-05	7.510E-08	1.027E 06	1.625E-02	2.657E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7371	113	77	.0486	4.896E-02	4.5118E-02
OP SIDE(OS)	8494	113	77	.0486	4.896E-02	4.5118E-02
MOTION(MOT)	7671	113	77	.0486	4.896E-02	4.5118E-02
TOP(TOP)	8277	169	77	.0515	1.251E-01	1.2317E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6054(169)	15.19	14.18	1.684E-03	.1036	2.087E-03	.1284	2.370E-03	.1458	2.723E-03
OS 854(113)	15.19	14.18	5.823E-04	.0358	7.108E-04	.0437	7.979E-04	.0491	9.441E-04
MOT 3184(113)	15.19	14.18	5.823E-04	.0358	7.108E-04	.0437	7.979E-04	.0491	9.441E-04
NOS 7584(113)	15.22	14.21	5.818E-04	.0358	7.102E-04	.0437	7.972E-04	.0491	9.441E-04
TOP 6055(169)	16.29	15.28	1.623E-03	.0998	2.010E-03	.1237	2.283E-03	.1405	2.624E-03
OS 855(113)	16.29	15.28	5.609E-04	.0345	6.847E-04	.0421	7.686E-04	.0473	9.098E-04
MOT 3185(113)	16.29	15.28	5.609E-04	.0345	6.847E-04	.0421	7.686E-04	.0473	9.098E-04
NOS 7585(113)	16.29	15.28	5.609E-04	.0345	6.847E-04	.0421	7.686E-04	.0473	9.098E-04
TOP 6056(169)	17.37	16.36	1.568E-03	.0965	1.943E-03	.1195	2.207E-03	.1358	2.536E-03
OS 856(113)	17.37	16.36	5.422E-04	.0334	6.618E-04	.0407	7.429E-04	.0457	8.794E-04
MOT 3186(113)	17.37	16.36	5.422E-04	.0334	6.618E-04	.0407	7.429E-04	.0457	8.794E-04
NOS 7586(113)	17.37	16.36	5.422E-04	.0334	6.618E-04	.0407	7.429E-04	.0457	8.794E-04
TOP 6057(169)	18.47	17.46	1.518E-03	.0934	1.881E-03	.1157	2.136E-03	.1314	2.455E-03
OS 857(113)	18.47	17.46	5.248E-04	.0323	6.406E-04	.0394	7.191E-04	.0442	8.512E-04
MOT 3187(113)	18.47	17.46	5.248E-04	.0323	6.406E-04	.0394	7.191E-04	.0442	8.512E-04
NOS 7587(113)	18.47	17.46	5.248E-04	.0323	6.406E-04	.0394	7.191E-04	.0442	8.512E-04
TOP 6058(169)	19.55	18.54	1.473E-03	.0907	1.825E-03	.1123	2.073E-03	.1275	2.383E-03
OS 858(113)	19.55	18.54	5.093E-04	.0313	6.217E-04	.0383	6.979E-04	.0429	8.261E-04
MOT 3188(113)	19.55	18.54	5.093E-04	.0313	6.217E-04	.0383	6.979E-04	.0429	8.261E-04
NOS 7588(113)	19.55	18.54	5.093E-04	.0313	6.217E-04	.0383	6.979E-04	.0429	8.261E-04
MOT 3189(113)	20.62	19.61	4.951E-04	.0305	6.044E-04	.0372	6.785E-04	.0417	8.028E-04
TOP 6059(169)	20.65	19.64	1.431E-03	.0881	1.773E-03	.1091	2.014E-03	.1239	2.315E-03
OS 859(113)	20.65	19.64	4.948E-04	.0304	6.040E-04	.0372	6.781E-04	.0417	8.026E-04
NOS 7589(113)	20.65	19.64	4.948E-04	.0304	6.040E-04	.0372	6.781E-04	.0417	8.026E-04
TOP 6060(169)	21.72	20.71	1.394E-03	.0857	1.727E-03	.1062	1.961E-03	.1206	2.253E-03
OS 860(113)	21.72	20.71	4.818E-04	.0296	5.881E-04	.0362	6.602E-04	.0406	7.811E-04
MOT 3190(113)	21.72	20.71	4.818E-04	.0296	5.881E-04	.0362	6.602E-04	.0406	7.811E-04
NOS 7590(113)	21.72	20.71	4.818E-04	.0296	5.881E-04	.0362	6.602E-04	.0406	7.811E-04

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3/29/74

NASA-RI 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
20	1	7.95	213.8	1272	29.97	.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	1.009	3762	2.051E-05	7.510E-08	1.628E 06	1.626E-02	2.656E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	77	.0486	4.896E-02	4.5118E-02
OP SIDE(OS)	8494	113	77	.0486	4.896E-02	4.5118E-02
BOTTOM(BOT)	7671	113	77	.0486	4.896E-02	4.5118E-02
TOP(TOP)	8377	169	77	.0515	1.251E-01	1.2317E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6061(169)	22.80	21.79	1.359E-03	.0837	1.683E-03	.1037	1.912E-03	.1177	2.201E-03
OS 861(113)	22.80	21.79	4.697E-04	.0289	5.734E-04	.0353	6.437E-04	.0396	7.430E-04
BOT 3191(113)	22.80	21.79	4.697E-04	.0289	5.734E-04	.0353	6.437E-04	.0396	7.430E-04
NOS 7591(113)	22.80	21.79	4.697E-04	.0289	5.734E-04	.0353	6.437E-04	.0396	7.430E-04
TOP 6062(169)	23.90	22.89	1.326E-03	.0816	1.642E-03	.1011	1.865E-03	.1148	2.145E-03
OS 862(113)	23.90	22.89	4.583E-04	.0282	5.594E-04	.0344	6.280E-04	.0387	7.437E-04
BOT 3192(113)	23.90	22.89	4.583E-04	.0282	5.594E-04	.0344	6.280E-04	.0387	7.437E-04
NOS 7592(113)	23.90	22.89	4.583E-04	.0282	5.594E-04	.0344	6.280E-04	.0387	7.437E-04
TOP 6063(169)	24.98	23.97	1.296E-03	.0797	1.605E-03	.0987	1.823E-03	.1121	2.094E-03
OS 863(113)	24.98	23.97	4.479E-04	.0276	5.467E-04	.0336	6.138E-04	.0378	7.262E-04
BOT 3193(113)	24.98	23.97	4.479E-04	.0276	5.467E-04	.0336	6.138E-04	.0378	7.262E-04
NOS 7593(113)	24.98	23.97	4.479E-04	.0276	5.467E-04	.0336	6.138E-04	.0378	7.262E-04
BOT 3194(113)	26.05	25.04	4.382E-04	.0270	5.349E-04	.0329	6.004E-04	.0369	7.107E-04
TOP 6064(169)	26.08	25.07	1.267E-03	.0779	1.569E-03	.0965	1.782E-03	.1096	2.048E-03
OS 864(113)	26.08	25.07	4.380E-04	.0269	5.346E-04	.0329	6.001E-04	.0369	7.101E-04
NOS 7594(113)	26.08	25.07	4.380E-04	.0269	5.346E-04	.0329	6.001E-04	.0369	7.101E-04
TOP 6065(169)	27.16	26.14	1.241E-03	.0763	1.537E-03	.0946	1.745E-03	.1074	2.006E-03
OS 865(113)	27.16	26.14	4.288E-04	.0264	5.235E-04	.0322	5.877E-04	.0362	6.956E-04
BOT 3195(113)	27.16	26.14	4.288E-04	.0264	5.235E-04	.0322	5.877E-04	.0362	6.956E-04
NOS 7595(113)	27.16	26.14	4.288E-04	.0264	5.235E-04	.0322	5.877E-04	.0362	6.956E-04
TOP 6066(169)	28.23	27.22	1.216E-03	.0748	1.506E-03	.0926	1.711E-03	.1052	1.965E-03
OS 866(113)	28.23	27.22	4.203E-04	.0259	5.130E-04	.0316	5.759E-04	.0354	6.814E-04
BOT 3196(113)	28.23	27.22	4.203E-04	.0259	5.130E-04	.0316	5.759E-04	.0354	6.814E-04
NOS 7596(113)	28.23	27.22	4.203E-04	.0259	5.130E-04	.0316	5.759E-04	.0354	6.814E-04
TOP 6067(169)	29.33	28.32	1.192E-03	.0733	1.477E-03	.0909	1.677E-03	.1032	1.927E-03
OS 867(113)	29.33	28.32	4.120E-04	.0254	5.030E-04	.0309	5.646E-04	.0347	6.683E-04
BOT 3197(113)	29.33	28.32	4.120E-04	.0254	5.030E-04	.0309	5.646E-04	.0347	6.683E-04
NOS 7597(113)	29.33	28.32	4.120E-04	.0254	5.030E-04	.0309	5.646E-04	.0347	6.683E-04

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NASA-RI OH50 AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VA526 VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
20	1	7.95	213.7	1272	29.97	.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	1.098	3762	2.050E-05	7.510E-08	1.027E 06	1.625E-02	2.657E-02

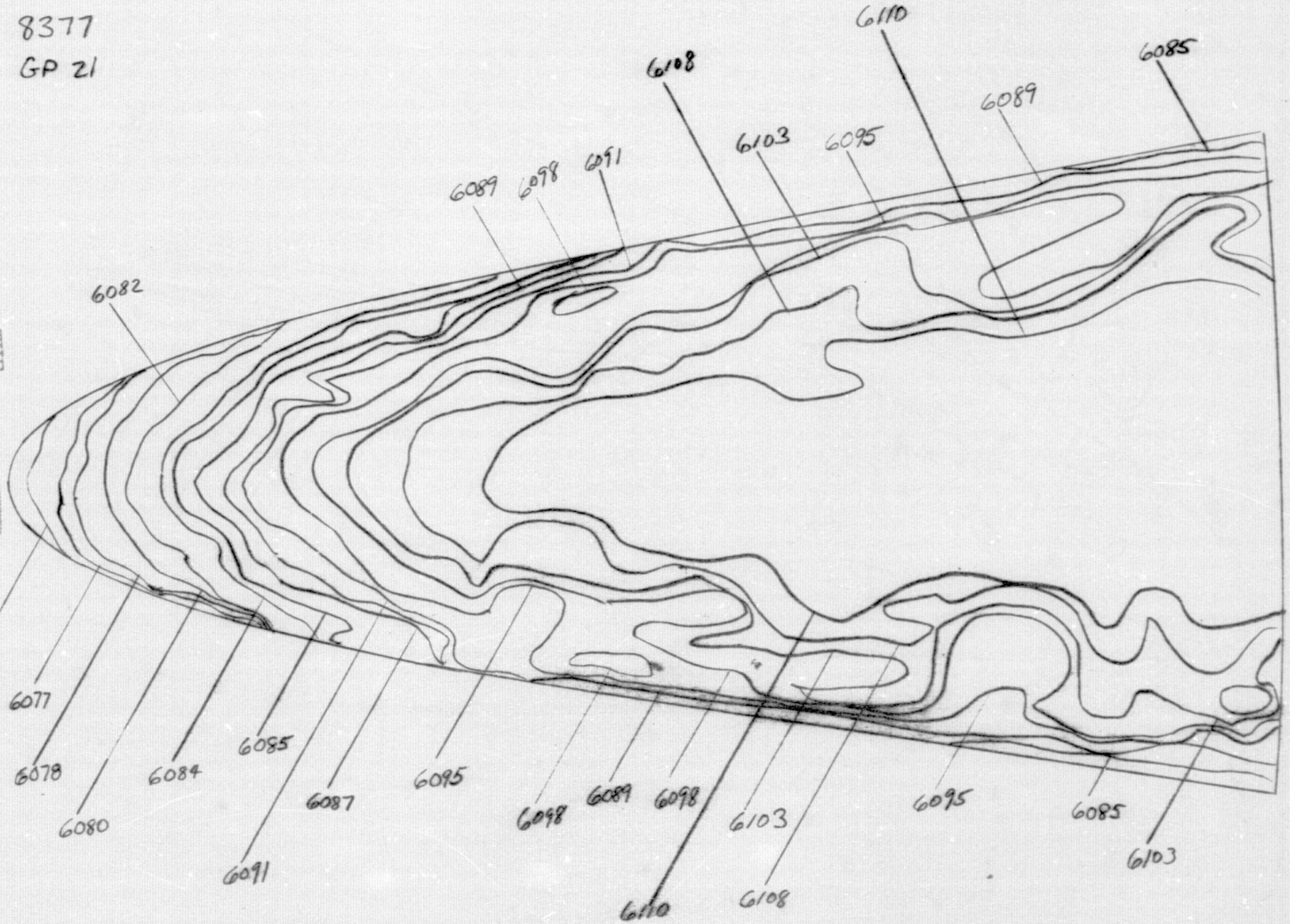
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	77	.0486	4.896E-02	4.5118E-02
OP SIDE(OS)	8496	113	77	.0486	4.896E-02	4.5118E-02
HOTTOM(BOT)	7671	113	77	.0486	4.896E-02	4.5118E-02
TOP(TOP)	8377	169	77	.0515	1.251E-01	1.2317E-01

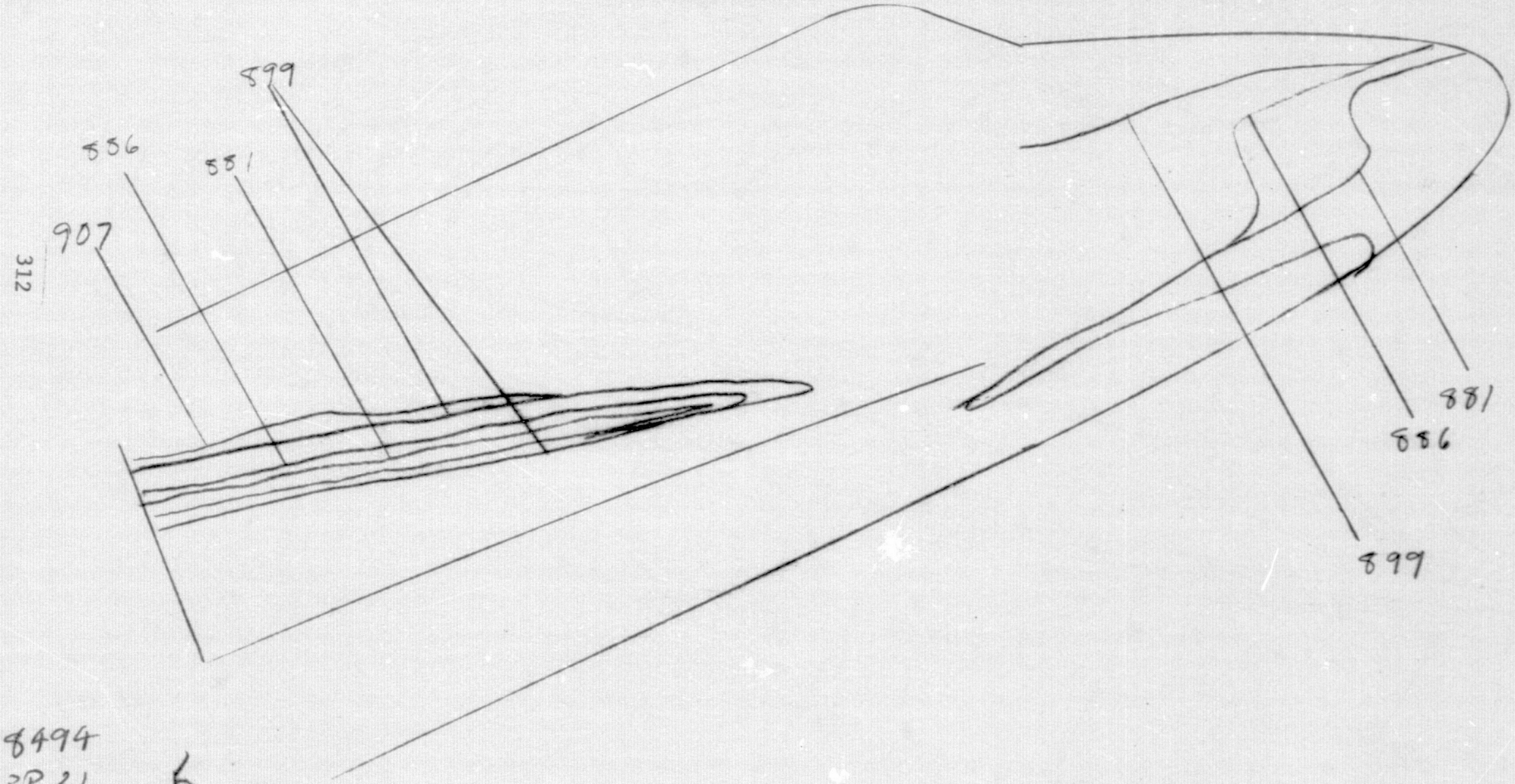
PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6068(169)	30.41	29.40	1.170E-03	.0720	1.449E-03	.0891	1.646E-03	.1013	1.891E-03
OS 868(113)	30.41	29.40	4.044E-04	.0249	4.937E-04	.0304	5.542E-04	.0341	6.557E-04
HOT 3198(113)	30.41	29.40	4.044E-04	.0249	4.937E-04	.0304	5.542E-04	.0341	6.557E-04
NOS 7598(113)	30.41	29.40	4.044E-04	.0249	4.937E-04	.0304	5.542E-04	.0341	6.557E-04
TOP 6069(169)	31.49	30.47	1.149E-03	.0707	1.423E-03	.0876	1.617E-03	.0995	1.858E-03
OS 869(113)	31.49	30.47	3.972E-04	.0244	4.849E-04	.0298	5.443E-04	.0335	6.443E-04
HOT 3199(113)	31.49	30.47	3.972E-04	.0244	4.849E-04	.0298	5.443E-04	.0335	6.443E-04
NOS 7599(113)	31.49	30.47	3.972E-04	.0244	4.849E-04	.0298	5.443E-04	.0335	6.443E-04
TOP 6070(169)	32.59	31.58	1.129E-03	.0695	1.398E-03	.0860	1.588E-03	.0977	1.825E-03
OS 870(113)	32.59	31.58	3.902E-04	.0240	4.763E-04	.0293	5.347E-04	.0329	6.330E-04
HOT 3200(113)	32.59	31.58	3.902E-04	.0240	4.763E-04	.0293	5.347E-04	.0329	6.330E-04
NOS 7600(113)	32.59	31.58	3.902E-04	.0240	4.763E-04	.0293	5.347E-04	.0329	6.330E-04
TOP 6071(169)	33.66	32.65	1.110E-03	.0683	1.375E-03	.0846	1.562E-03	.0961	1.794E-03
OS 871(113)	33.66	32.65	3.837E-04	.0236	4.684E-04	.0288	5.258E-04	.0323	6.221E-04
HOT 3201(113)	33.66	32.65	3.837E-04	.0236	4.684E-04	.0288	5.258E-04	.0323	6.221E-04
NOS 7601(113)	33.66	32.65	3.837E-04	.0236	4.684E-04	.0288	5.258E-04	.0323	6.221E-04
TOP 6072(169)	34.76	33.75	1.092E-03	.0672	1.353E-03	.0832	1.536E-03	.0945	1.766E-03
OS 872(113)	34.76	33.75	3.774E-04	.0232	4.607E-04	.0283	5.172E-04	.0318	6.122E-04
HOT 3202(113)	34.76	33.75	3.774E-04	.0232	4.607E-04	.0283	5.172E-04	.0318	6.122E-04
NOS 7602(113)	34.76	33.75	3.774E-04	.0232	4.607E-04	.0283	5.172E-04	.0318	6.122E-04
	35.52		MODEL HAS LEFT CENTERLINE						
TOP 6073(169)	35.84	34.83	1.075E-03	.0661	1.331E-03	.0819	1.512E-03	.0930	1.737E-03
OS 873(113)	35.84	34.83	3.715E-04	.0229	4.535E-04	.0279	5.091E-04	.0313	6.024E-04
HOT 3203(113)	35.84	34.83	3.715E-04	.0229	4.535E-04	.0279	5.091E-04	.0313	6.024E-04
NOS 7603(113)	35.84	34.83	3.715E-04	.0229	4.535E-04	.0279	5.091E-04	.0313	6.024E-04

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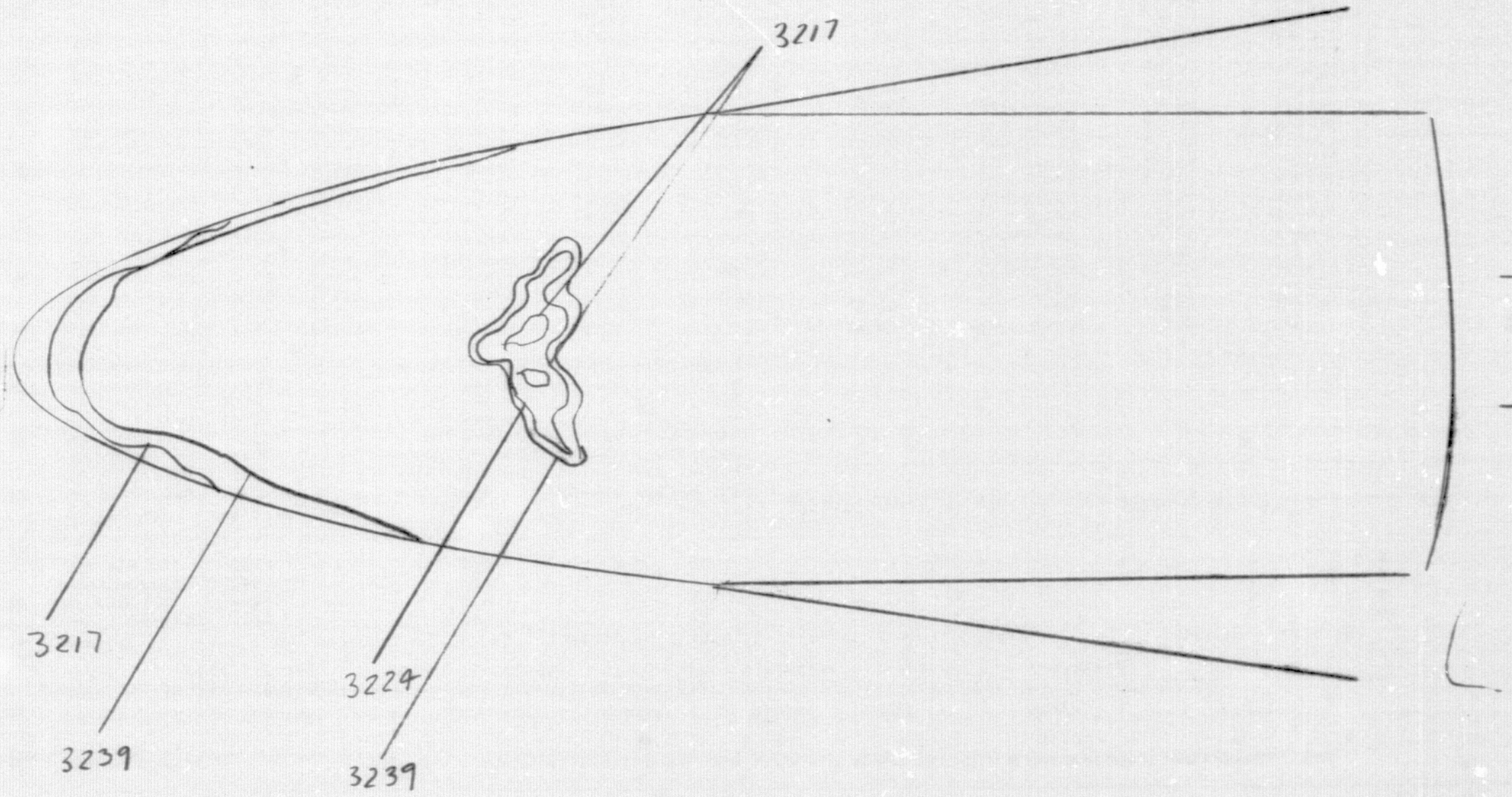
8377
GP 21

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR





8494
GRP 21
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GRP 21

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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3/29/74

NASA-RI 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA52E

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PRESEND	ROLL-MODEL	YAW
21	1	7.95	212.1	1277	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.023	1.001	3769	3.028E-05	7.536E-08	1.014E 06	1.620E-02	2.673E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7371	113	76	.0486	0	0
UP SIDE(OS)	8494	113	76	.0486	0	0
BOTTOM(BOT)	7671	113	76	.0486	0	0
TOP(TOP)	8377	169	76	.0515	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
HO 3204(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 6074(169)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 874(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 7604(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 6075(169)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 875(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 3205(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7605(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 6076(169)	2.18	1.17	5.897E-03	.3638	7.297E-03	.4502	8.282E-03	.5110	9.613E-03
OS 876(113)	2.18	1.17	2.075E-03	.1280	2.528E-03	.1560	2.840E-03	.1752	3.393E-03
BOT 3206(113)	2.18	1.17	2.075E-03	.1280	2.528E-03	.1560	2.840E-03	.1752	3.393E-03
NOS 7606(113)	2.18	1.17	2.075E-03	.1280	2.528E-03	.1560	2.840E-03	.1752	3.393E-03
TOP 6077(169)	3.25	2.24	4.252E-03	.2624	5.262E-03	.3247	5.972E-03	.3685	6.935E-03
OS 877(113)	3.25	2.24	1.496E-03	.0923	1.823E-03	.1125	2.048E-03	.1264	2.447E-03
BOT 3207(113)	3.25	2.24	1.496E-03	.0923	1.823E-03	.1125	2.048E-03	.1264	2.447E-03
NOS 7607(113)	3.25	2.24	1.496E-03	.0923	1.823E-03	.1125	2.048E-03	.1264	2.447E-03
TOP 6078(169)	4.36	3.34	3.482E-03	.2148	4.309E-03	.2658	4.891E-03	.3017	5.677E-03
OS 878(113)	4.36	3.34	1.225E-03	.0756	1.493E-03	.0921	1.677E-03	.1035	2.003E-03
BOT 3208(113)	4.36	3.34	1.225E-03	.0756	1.493E-03	.0921	1.677E-03	.1035	2.003E-03
NOS 7608(113)	4.36	3.34	1.225E-03	.0756	1.493E-03	.0921	1.677E-03	.1035	2.003E-03
TOP 6079(169)	5.43	4.42	3.028E-03	.1868	3.748E-03	.2312	4.254E-03	.2624	4.935E-03
OS 879(113)	5.43	4.42	1.066E-03	.0657	1.298E-03	.0801	1.458E-03	.0900	1.742E-03
BOT 3209(113)	5.43	4.42	1.066E-03	.0657	1.298E-03	.0801	1.458E-03	.0900	1.742E-03
NOS 7609(113)	5.43	4.42	1.066E-03	.0657	1.298E-03	.0801	1.458E-03	.0900	1.742E-03
TOP 6080(169)	6.51	5.50	2.716E-03	.1675	3.361E-03	.2072	3.814E-03	.2352	4.424E-03
OS 880(113)	6.51	5.50	9.555E-04	.0589	1.164E-03	.0718	1.308E-03	.0806	1.561E-03
BOT 3210(113)	6.51	5.50	9.555E-04	.0589	1.164E-03	.0718	1.308E-03	.0806	1.561E-03
NOS 7610(113)	6.51	5.50	9.555E-04	.0589	1.164E-03	.0718	1.308E-03	.0806	1.561E-03

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NASA-RI OH50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
21	1	7.95	212.5	1277	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.023	1.093	3769	2.091E-05	7.537E-08	1.016E 06	1.622E-02	2.670E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7371	113	76	.0486	4.995E-02	4.6091E-02
UP SIDE(US)	8494	113	76	.0486	4.995E-02	4.6091E-02
HOTTOM(BOT)	7671	113	76	.0486	4.995E-02	4.6091E-02
TOP(TOP)	8377	169	76	.0515	1.255E-01	1.2362E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
HOT 3211(113)	7.58	6.57	8.738E-04	.0539	1.065E-03	.0656	1.196E-03	.0737	1.427E-03
TOP 6081(169)	7.61	6.60	2.479E-03	.1528	3.067E-03	.1891	3.482E-03	.2146	4.036E-03
OS 881(113)	7.61	6.60	8.721E-04	.0538	1.063E-03	.0655	1.194E-03	.0736	1.424E-03
NOS 7611(113)	7.61	6.60	8.721E-04	.0538	1.063E-03	.0655	1.194E-03	.0736	1.424E-03
TOP 6082(169)	8.68	7.67	2.298E-03	.1417	2.844E-03	.1754	3.228E-03	.1991	3.743E-03
OS 882(113)	8.68	7.67	8.087E-04	.0499	9.853E-04	.0608	1.107E-03	.0683	1.321E-03
HOT 3212(113)	8.68	7.67	8.087E-04	.0499	9.853E-04	.0608	1.107E-03	.0683	1.321E-03
NOS 7612(113)	8.68	7.67	8.087E-04	.0499	9.853E-04	.0608	1.107E-03	.0683	1.321E-03
TOP 6083(169)	9.76	8.75	2.152E-03	.1327	2.663E-03	.1642	3.023E-03	.1863	3.502E-03
HOT 3213(113)	9.76	8.75	7.573E-04	.0467	9.228E-04	.0569	1.037E-03	.0639	1.236E-03
OS 883(113)	9.79	8.77	7.562E-04	.0466	9.214E-04	.0568	1.035E-03	.0638	1.235E-03
NOS 7613(113)	9.79	8.77	7.562E-04	.0466	9.214E-04	.0568	1.035E-03	.0638	1.235E-03
TOP 6084(169)	10.86	9.85	2.029E-03	.1250	2.510E-03	.1547	2.849E-03	.1756	3.299E-03
OS 884(113)	10.86	9.85	7.137E-04	.0440	8.696E-04	.0536	9.769E-04	.0602	1.164E-03
HOT 3214(113)	10.86	9.85	7.137E-04	.0440	8.696E-04	.0536	9.769E-04	.0602	1.164E-03
NOS 7614(113)	10.86	9.85	7.137E-04	.0440	8.696E-04	.0536	9.769E-04	.0602	1.164E-03
TOP 6085(169)	11.94	10.93	1.926E-03	.1187	2.383E-03	.1469	2.705E-03	.1668	3.138E-03
OS 885(113)	11.94	10.93	6.776E-04	.0418	8.257E-04	.0509	9.275E-04	.0572	1.107E-03
HOT 3215(113)	11.94	10.93	6.776E-04	.0418	8.257E-04	.0509	9.275E-04	.0572	1.107E-03
NOS 7615(113)	11.94	10.93	6.776E-04	.0418	8.257E-04	.0509	9.275E-04	.0572	1.107E-03
TOP 6086(169)	13.04	12.03	1.836E-03	.1131	2.272E-03	.1400	2.578E-03	.1589	2.986E-03
OS 886(113)	13.04	12.03	6.459E-04	.0398	7.870E-04	.0485	8.640E-04	.0545	1.054E-03
HOT 3216(113)	13.04	12.03	6.459E-04	.0398	7.870E-04	.0485	8.640E-04	.0545	1.054E-03
NOS 7616(113)	13.04	12.03	6.459E-04	.0398	7.870E-04	.0485	8.640E-04	.0545	1.054E-03
TOP 6087(169)	14.12	13.10	1.759E-03	.1083	2.176E-03	.1340	2.470E-03	.1521	2.858E-03
OS 887(113)	14.12	13.10	6.188E-04	.0381	7.540E-04	.0464	8.469E-04	.0522	1.009E-03
HOT 3217(113)	14.12	13.10	6.189E-04	.0381	7.540E-04	.0464	8.469E-04	.0522	1.009E-03
NOS 7617(113)	14.12	13.10	6.188E-04	.0381	7.540E-04	.0464	8.469E-04	.0522	1.009E-03

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NASA-RI 0H50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VAS26 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
21	1	7.95	213.0	1277	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.023	1.005	3769	2.036E-05	7.537E-08	1.018E 06	1.624E-02	2.667E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCAKK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7371	113	76	.0486	4.995E-02	4.6091E-02
UP SIDE(US)	8494	113	76	.0486	4.995E-02	4.6091E-02
HOTTOM(BOT)	7671	113	76	.0486	4.995E-02	4.6091E-02
TOP(TOP)	8377	169	76	.0515	1.255E-01	1.2362E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
BOT 3218(113)	15.19	14.18	5.848E-04	.0366	7.246E-04	.0447	8.142E-04	.0502	9.700E-04
TOP 6088(169)	15.22	14.21	1.689E-03	.1041	2.090E-03	.1288	2.373E-03	.1462	2.746E-03
OS 888(113)	15.22	14.21	5.943E-04	.0366	7.242E-04	.0446	8.135E-04	.0501	9.692E-04
NOS 7618(113)	15.22	14.21	5.943E-04	.0366	7.242E-04	.0446	8.135E-04	.0501	9.692E-04
TOP 6089(169)	16.29	15.28	1.629E-03	.1003	2.015E-03	.1241	2.287E-03	.1409	2.647E-03
OS 889(113)	16.29	15.28	5.730E-04	.0353	6.982E-04	.0430	7.843E-04	.0483	9.340E-04
BOT 3219(113)	16.29	15.28	5.730E-04	.0353	6.982E-04	.0430	7.843E-04	.0483	9.340E-04
NOS 7619(113)	16.29	15.28	5.730E-04	.0353	6.982E-04	.0430	7.843E-04	.0483	9.340E-04
TOP 6090(169)	17.37	16.36	1.574E-03	.0970	1.948E-03	.1200	2.211E-03	.1362	2.558E-03
BOT 3220(113)	17.37	16.36	5.453E-04	.0341	6.749E-04	.0416	7.580E-04	.0467	9.026E-04
OS 890(113)	17.40	16.38	5.534E-04	.0341	6.743E-04	.0415	7.575E-04	.0467	9.020E-04
NOS 7620(113)	17.40	16.38	5.534E-04	.0341	6.743E-04	.0415	7.575E-04	.0467	9.020E-04
TOP 6091(169)	18.47	17.46	1.524E-03	.0939	1.885E-03	.1162	2.140E-03	.1318	2.477E-03
OS 891(113)	18.47	17.46	5.361E-04	.0330	6.532E-04	.0402	7.338E-04	.0452	8.742E-04
BOT 3221(113)	18.47	17.46	5.361E-04	.0330	6.532E-04	.0402	7.338E-04	.0452	8.742E-04
NOS 7621(113)	18.47	17.46	5.361E-04	.0330	6.532E-04	.0402	7.338E-04	.0452	8.742E-04
TOP 6092(169)	19.55	18.54	1.479E-03	.0910	1.830E-03	.1127	2.077E-03	.1279	2.401E-03
OS 892(113)	19.55	18.54	5.203E-04	.0320	6.340E-04	.0390	7.121E-04	.0438	8.472E-04
BOT 3222(113)	19.55	18.54	5.203E-04	.0320	6.340E-04	.0390	7.121E-04	.0438	8.472E-04
NOS 7622(113)	19.55	18.54	5.203E-04	.0320	6.340E-04	.0390	7.121E-04	.0438	8.472E-04
BOT 3223(113)	20.62	19.61	5.058E-04	.0311	6.163E-04	.0379	6.923E-04	.0426	8.237E-04
TOP 6093(169)	20.65	19.64	1.437E-03	.0884	1.778E-03	.1094	2.018E-03	.1242	2.331E-03
OS 893(113)	20.65	19.64	5.055E-04	.0311	6.159E-04	.0379	6.919E-04	.0426	8.228E-04
NOS 7623(113)	20.65	19.64	5.055E-04	.0311	6.159E-04	.0379	6.919E-04	.0426	8.228E-04
TOP 6094(169)	21.72	20.71	1.399E-03	.0861	1.731E-03	.1066	1.965E-03	.1210	2.271E-03
OS 894(113)	21.72	20.71	4.922E-04	.0303	5.997E-04	.0369	6.737E-04	.0415	8.015E-04
BOT 3224(113)	21.72	20.71	4.922E-04	.0303	5.997E-04	.0369	6.737E-04	.0415	8.015E-04
NOS 7624(113)	21.72	20.71	4.922E-04	.0303	5.997E-04	.0369	6.737E-04	.0415	8.015E-04

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NASA-RI OH50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREREND	ROLL-MODEL	YAW
21	1	7.95	213.2	1277	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.023	1.096	3769	2.038E-05	7.537E-08	1.019E 06	1.624E-02	2.666E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	76	.0486	4.995E-02	4.6091E-02
OP SIDE(OS)	8494	113	76	.0486	4.995E-02	4.6091E-02
BOTTOM(BOT)	7671	113	76	.0486	4.995E-02	4.6091E-02
TOP(TOP)	8377	169	76	.0515	1.255E-01	1.2362E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 6095(169)	22.80	21.79	1.364E-03	.0840	1.688E-03	.1039	1.916E-03	.1179	2.214E-03
OS 895(113)	22.80	21.79	4.799E-04	.0295	5.847E-04	.0360	6.568E-04	.0404	7.814E-04
BOT 3225(113)	22.80	21.79	4.799E-04	.0295	5.847E-04	.0360	6.568E-04	.0404	7.814E-04
NOS 7625(113)	22.80	21.79	4.799E-04	.0295	5.847E-04	.0360	6.568E-04	.0404	7.814E-04
TOP 6096(169)	23.90	22.89	1.331E-03	.0819	1.647E-03	.1014	1.869E-03	.1150	2.159E-03
OS 896(113)	23.90	22.89	4.682E-04	.0288	5.705E-04	.0351	6.408E-04	.0394	7.621E-04
BOT 3226(113)	23.90	22.89	4.682E-04	.0288	5.705E-04	.0351	6.408E-04	.0394	7.621E-04
NOS 7626(113)	23.90	22.89	4.682E-04	.0288	5.705E-04	.0351	6.408E-04	.0394	7.621E-04
TOP 6097(169)	24.98	23.97	1.300E-03	.0800	1.609E-03	.0990	1.827E-03	.1123	2.106E-03
OS 897(113)	24.98	23.97	4.576E-04	.0281	5.575E-04	.0343	6.263E-04	.0385	7.434E-04
BOT 3227(113)	24.98	23.97	4.576E-04	.0281	5.575E-04	.0343	6.263E-04	.0385	7.434E-04
NOS 7627(113)	24.98	23.97	4.576E-04	.0281	5.575E-04	.0343	6.263E-04	.0385	7.434E-04
BOT 3228(113)	26.05	25.04	4.476E-04	.0276	5.454E-04	.0336	6.127E-04	.0377	7.289E-04
TOP 6098(169)	26.08	25.07	1.272E-03	.0783	1.574E-03	.0968	1.786E-03	.1099	2.063E-03
OS 898(113)	26.08	25.07	4.474E-04	.0275	5.451E-04	.0336	6.124E-04	.0377	7.282E-04
NOS 7628(113)	26.08	25.07	4.474E-04	.0275	5.451E-04	.0336	6.124E-04	.0377	7.282E-04
TOP 6099(169)	27.16	26.14	1.245E-03	.0766	1.541E-03	.0948	1.749E-03	.1076	2.021E-03
OS 899(113)	27.16	26.14	4.381E-04	.0270	5.338E-04	.0329	5.996E-04	.0369	7.131E-04
BOT 3229(113)	27.16	26.14	4.381E-04	.0270	5.338E-04	.0329	5.996E-04	.0369	7.131E-04
NOS 7629(113)	27.16	26.14	4.381E-04	.0270	5.338E-04	.0329	5.996E-04	.0369	7.131E-04
TOP 6100(169)	28.23	27.22	1.220E-03	.0751	1.510E-03	.0929	1.714E-03	.1055	1.979E-03
OS 900(113)	28.23	27.22	4.293E-04	.0264	5.232E-04	.0322	5.876E-04	.0362	6.985E-04
BOT 3230(113)	28.23	27.22	4.293E-04	.0264	5.232E-04	.0322	5.876E-04	.0362	6.985E-04
NOS 7630(113)	28.23	27.22	4.293E-04	.0264	5.232E-04	.0322	5.876E-04	.0362	6.985E-04
TOP 6101(169)	29.33	28.32	1.196E-03	.0736	1.480E-03	.0911	1.680E-03	.1034	1.940E-03
OS 901(113)	29.33	28.32	4.209E-04	.0259	5.129E-04	.0316	5.761E-04	.0355	6.848E-04
BOT 3231(113)	29.33	28.32	4.209E-04	.0259	5.129E-04	.0316	5.761E-04	.0355	6.848E-04
NOS 7631(113)	29.33	28.32	4.209E-04	.0259	5.129E-04	.0316	5.761E-04	.0355	6.848E-04

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NASA-RI 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
21	1	7.95	213.4	1277	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.023	1.007	3769	2.040E-05	7.538E-08	1.020E 06	1.625E-02	2.665E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	76	.0486	4.995E-02	4.6091E-02
OP SIDE(OS)	8494	113	76	.0486	4.995E-02	4.6091E-02
BOTTOM(BOT)	7671	113	76	.0486	4.995E-02	4.6091E-02
TOP(TOP)	8377	169	76	.0515	1.255E-01	1.2362E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 6102(169)	30.41	29.40	1.174E-03	.0723	1.453E-03	.0894	1.649E-03	.1015	1.905E-03
OS 902(113)	30.41	29.40	4.131E-04	.0254	5.034E-04	.0310	5.655E-04	.0348	6.721E-04
BOT 3232(113)	30.41	29.40	4.131E-04	.0254	5.034E-04	.0310	5.655E-04	.0348	6.721E-04
NOS 7632(113)	30.41	29.40	4.131E-04	.0254	5.034E-04	.0310	5.655E-04	.0348	6.721E-04
TOP 6103(169)	31.49	30.47	1.153E-03	.0710	1.427E-03	.0878	1.620E-03	.0997	1.870E-03
OS 903(113)	31.49	30.47	4.058E-04	.0250	4.944E-04	.0304	5.554E-04	.0342	6.599E-04
BOT 3233(113)	31.49	30.47	4.058E-04	.0250	4.944E-04	.0304	5.554E-04	.0342	6.599E-04
NOS 7633(113)	31.49	30.47	4.058E-04	.0250	4.944E-04	.0304	5.554E-04	.0342	6.599E-04
TOP 6104(169)	32.59	31.58	1.133E-03	.0697	1.402E-03	.0863	1.591E-03	.0979	1.837E-03
OS 904(113)	32.59	31.58	3.986E-04	.0245	4.857E-04	.0299	5.456E-04	.0336	6.483E-04
BOT 3234(113)	32.59	31.58	3.986E-04	.0245	4.857E-04	.0299	5.456E-04	.0336	6.483E-04
NOS 7634(113)	32.59	31.58	3.986E-04	.0245	4.857E-04	.0299	5.456E-04	.0336	6.483E-04
TOP 6105(169)	33.66	32.65	1.114E-03	.0685	1.379E-03	.0848	1.565E-03	.0963	1.806E-03
OS 905(113)	33.66	32.65	3.920E-04	.0241	4.777E-04	.0294	5.366E-04	.0330	6.375E-04
BOT 3235(113)	33.66	32.65	3.920E-04	.0241	4.777E-04	.0294	5.366E-04	.0330	6.375E-04
NOS 7635(113)	33.66	32.65	3.920E-04	.0241	4.777E-04	.0294	5.366E-04	.0330	6.375E-04
TOP 6106(169)	34.74	33.73	1.096E-03	.0675	1.357E-03	.0835	1.540E-03	.0947	1.778E-03
OS 906(113)	34.74	33.73	3.857E-04	.0237	4.700E-04	.0289	5.279E-04	.0325	6.275E-04
BOT 3236(113)	34.76	33.75	3.856E-04	.0237	4.698E-04	.0289	5.277E-04	.0325	6.270E-04
NOS 7636(113)	34.76	33.75	3.856E-04	.0237	4.698E-04	.0289	5.277E-04	.0325	6.270E-04
TOP 6107(169)	35.84	34.83	1.079E-03	.0664	1.335E-03	.0821	1.515E-03	.0932	1.749E-03
OS 907(113)	35.84	34.83	3.796E-04	.0234	4.625E-04	.0285	5.195E-04	.0320	6.172E-04
BOT 3237(113)	35.84	34.83	3.796E-04	.0234	4.625E-04	.0285	5.195E-04	.0320	6.172E-04
NOS 7637(113)	35.84	34.83	3.796E-04	.0234	4.625E-04	.0285	5.195E-04	.0320	6.172E-04
TOP 6108(169)	36.92	35.91	1.063E-03	.0672	1.315E-03	.0831	1.492E-03	.0944	1.589E-03
OS 908(113)	36.92	35.91	3.738E-04	.0236	4.555E-04	.0288	5.117E-04	.0324	5.608E-04
BOT 3238(113)	36.92	35.91	3.738E-04	.0236	4.555E-04	.0288	5.117E-04	.0324	5.608E-04
NOS 7638(113)	36.92	35.91	3.738E-04	.0236	4.555E-04	.0288	5.117E-04	.0324	5.608E-04

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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VAS?6

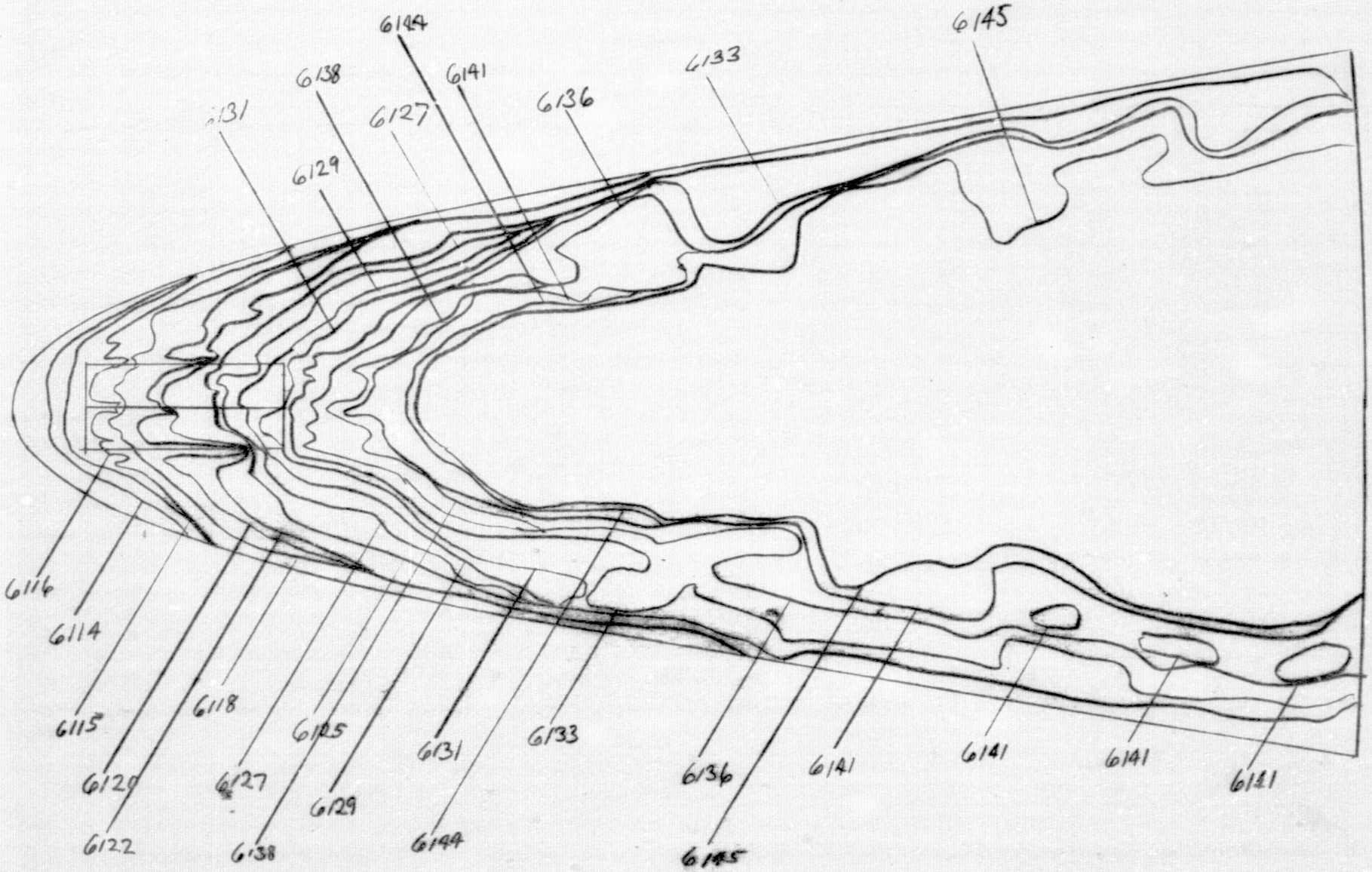
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
21	1	7.95	213.6	1088	25.01	4.99	30.00	0	0

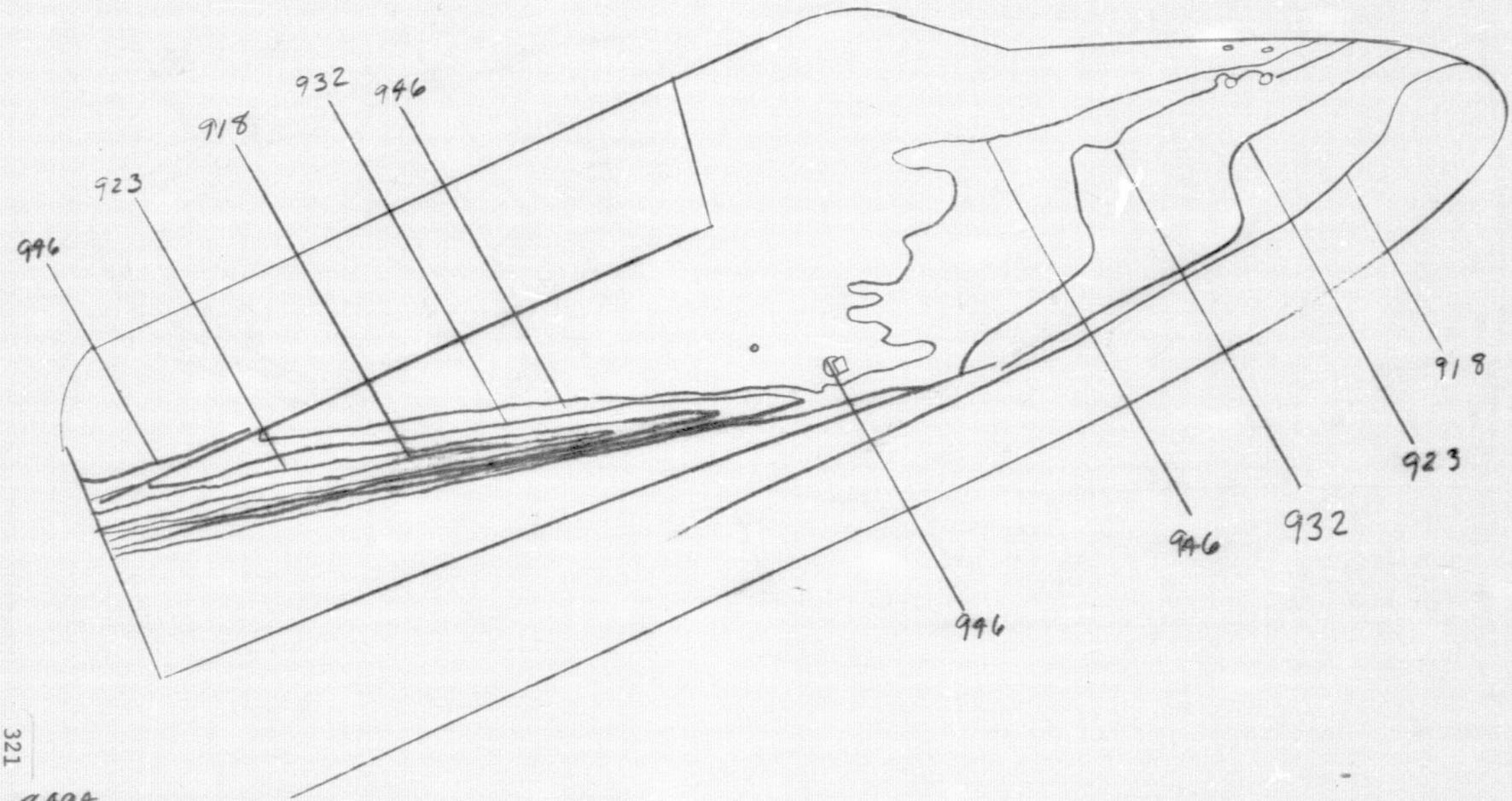
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
7?.8	.023	1.008	3479	2.397E-05	6.421E-08	1.299E 06	1.582E-02	2.416E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	76	.0486	4.995E-02	4.6091E-02
OP SIDE(OS)	8494	113	76	.0486	4.995E-02	4.6091E-02
HOTTOM(BOT)	7671	113	76	.0486	4.995E-02	4.6091E-02
TOP(TOP)	8377	169	76	.0515	1.255E-01	1.2362E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 6109(169)	38.02	37.01	1.047E-03	.0663	1.295E-03	.0796	1.470E-03	.0904	1.696E-03
OS 909(113)	38.02	37.01	3.682E-04	.0226	4.487E-04	.0276	5.040E-04	.0310	5.987E-04
HOT 3239(113)	38.02	37.01	3.682E-04	.0226	4.487E-04	.0276	5.040E-04	.0310	5.987E-04
NOS 7639(113)	38.02	37.01	3.682E-04	.0226	4.487E-04	.0276	5.040E-04	.0310	5.987E-04
	38.32		MODEL WAS LEFT CENTERLINE						
TOP 6110(169)	39.09	38.08	1.032E-03	.0634	1.277E-03	.0785	1.449E-03	.0891	1.672E-03
OS 910(113)	39.09	38.08	3.630E-04	.0223	4.423E-04	.0272	4.968E-04	.0306	5.902E-04
HOT 3240(113)	39.09	38.08	3.630E-04	.0223	4.423E-04	.0272	4.968E-04	.0306	5.902E-04
NOS 7640(113)	39.09	38.08	3.630E-04	.0223	4.423E-04	.0272	4.968E-04	.0306	5.902E-04
OS 911(113)	40.17	39.16	3.580E-04	.0220	4.362E-04	.0268	4.899E-04	.0301	5.815E-04
HOT 3241(113)	40.17	39.16	3.580E-04	.0220	4.362E-04	.0268	4.899E-04	.0301	5.815E-04
TOP 6111(169)	40.20	39.18	1.017E-03	.0626	1.259E-03	.0774	1.429E-03	.0879	1.648E-03
NOS 7641(113)	40.20	39.18	3.576E-04	.0220	4.360E-04	.0268	4.898E-04	.0301	5.816E-04

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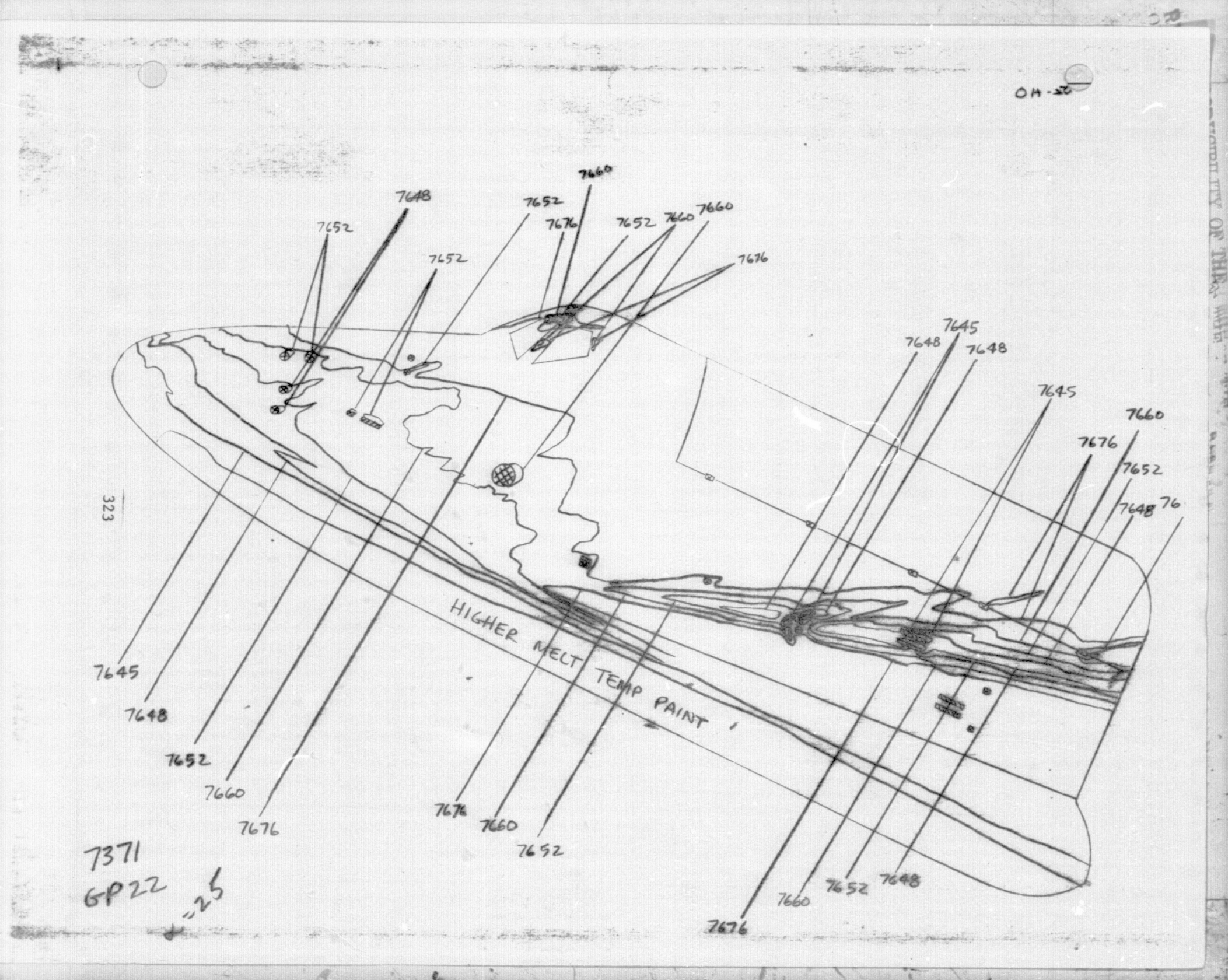


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3/29/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
22	1	7.95	210.6	1279	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.8	.022	.994	3772	2.011E-05	7.549E-08	1.005E 06	1.615E-02	2.684E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	78	.0486	0	0
UP SIDE(US)	8494	113	78	.0486	0	0
BOTTOM(BOT)	7671	113	78	.0486	0	0
TOP(TOP)	8377	169	78	.0515	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TO 6112(169)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 912(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 3242(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7642(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 6113(169)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 913(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 3243(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7643(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 6114(169)	2.18	1.17	5.755E-03	.3561	7.119E-03	.4406	8.077E-03	.4999	9.451E-03
OS 914(113)	2.18	1.17	1.956E-03	.1211	2.384E-03	.1475	2.677E-03	.1657	3.222E-03
HOT 3244(113)	2.18	1.17	1.956E-03	.1211	2.384E-03	.1475	2.677E-03	.1657	3.222E-03
NOS 7644(113)	2.18	1.17	1.956E-03	.1211	2.384E-03	.1475	2.677E-03	.1657	3.222E-03
TOP 6115(169)	3.25	2.24	4.150E-03	.2567	5.134E-03	.3176	5.824E-03	.3604	6.812E-03
OS 915(113)	3.25	2.24	1.411E-03	.0873	1.719E-03	.1063	1.931E-03	.1194	2.323E-03
HOT 3245(113)	3.25	2.24	1.411E-03	.0873	1.719E-03	.1063	1.931E-03	.1194	2.323E-03
NOS 7645(113)	3.25	2.24	1.411E-03	.0873	1.719E-03	.1063	1.931E-03	.1194	2.323E-03
TOP 6116(169)	4.33	3.32	3.411E-03	.2111	4.220E-03	.2611	4.788E-03	.2963	5.602E-03
OS 916(113)	4.33	3.32	1.159E-03	.0718	1.413E-03	.0874	1.587E-03	.0982	1.910E-03
HOT 3246(113)	4.33	3.32	1.159E-03	.0718	1.413E-03	.0874	1.587E-03	.0982	1.910E-03
NOS 7646(113)	4.33	3.32	1.159E-03	.0718	1.413E-03	.0874	1.587E-03	.0982	1.910E-03
HOT 3247(113)	5.41	4.39	1.008E-03	.0623	1.228E-03	.0760	1.379E-03	.0853	1.659E-03
TOP 6117(169)	5.43	4.42	2.956E-03	.1829	3.656E-03	.2262	4.148E-03	.2567	4.852E-03
OS 917(113)	5.43	4.42	1.005E-03	.0622	1.224E-03	.0757	1.375E-03	.0851	1.654E-03
NOS 7647(113)	5.43	4.42	1.005E-03	.0622	1.224E-03	.0757	1.375E-03	.0851	1.654E-03
TOP 6118(169)	6.51	5.50	2.650E-03	.1640	3.279E-03	.2029	3.720E-03	.2302	4.351E-03
OS 918(113)	6.51	5.50	9.009E-04	.0557	1.098E-03	.0679	1.233E-03	.0763	1.483E-03
HOT 3248(113)	6.51	5.50	9.009E-04	.0557	1.098E-03	.0679	1.233E-03	.0763	1.483E-03
NOS 7648(113)	6.51	5.50	9.009E-04	.0557	1.098E-03	.0679	1.233E-03	.0763	1.483E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
22	1	7.95	210.9	1279	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.8	.023	.996	3772	2.014E-05	7.549E-08	1.006E 06	1.616E-02	2.682E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOAC&K)	TBAR,TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	78	.0486	4.723E-02	4.3459E-02
UP SIDE(US)	8494	113	78	.0486	4.723E-02	4.3459E-02
HOTTOM(BOT)	7671	113	78	.0486	4.723E-02	4.3459E-02
TOP(TOP)	8377	169	78	.0515	1.228E-01	1.2065E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 6119(169)	7.58	6.57	2.424E-03	.1499	2.998E-03	.1855	3.402E-03	.2104	3.977E-03
US 919(113)	7.58	6.57	8.239E-04	.0510	1.004E-03	.0621	1.128E-03	.0697	1.356E-03
HOT 3249(113)	7.58	6.57	8.239E-04	.0510	1.004E-03	.0621	1.128E-03	.0697	1.356E-03
NOS 7649(113)	7.58	6.57	8.239E-04	.0510	1.004E-03	.0621	1.128E-03	.0697	1.356E-03
TOP 6120(169)	8.68	7.67	2.243E-03	.1387	2.775E-03	.1716	3.148E-03	.1947	3.679E-03
US 920(113)	8.68	7.67	7.625E-04	.0472	9.291E-04	.0575	1.044E-03	.0645	1.254E-03
HOT 3250(113)	8.68	7.67	7.625E-04	.0472	9.291E-04	.0575	1.044E-03	.0645	1.254E-03
NOS 7650(113)	8.68	7.67	7.625E-04	.0472	9.291E-04	.0575	1.044E-03	.0645	1.254E-03
TOP 6121(169)	9.76	8.75	2.101E-03	.1299	2.599E-03	.1607	2.948E-03	.1824	3.447E-03
US 921(113)	9.76	8.75	7.140E-04	.0442	8.701E-04	.0538	9.773E-04	.0604	1.175E-03
HOT 3251(113)	9.76	8.75	7.140E-04	.0442	8.701E-04	.0538	9.773E-04	.0604	1.175E-03
NOS 7651(113)	9.76	8.75	7.140E-04	.0442	8.701E-04	.0538	9.773E-04	.0604	1.175E-03
HOT 3252(113)	10.84	9.83	6.738E-04	.0417	8.211E-04	.0508	9.222E-04	.0570	1.108E-03
TOP 6122(169)	10.86	9.85	1.980E-03	.1224	2.449E-03	.1515	2.779E-03	.1718	3.247E-03
US 922(113)	10.86	9.85	6.729E-04	.0416	8.200E-04	.0507	9.210E-04	.0570	1.107E-03
NOS 7652(113)	10.86	9.85	6.729E-04	.0416	8.200E-04	.0507	9.210E-04	.0570	1.107E-03
TOP 6123(169)	11.94	10.93	1.880E-03	.1162	2.325E-03	.1438	2.638E-03	.1631	3.081E-03
US 923(113)	11.94	10.93	6.389E-04	.0395	7.786E-04	.0481	8.745E-04	.0541	1.051E-03
HOT 3253(113)	11.94	10.93	6.389E-04	.0395	7.786E-04	.0481	8.745E-04	.0541	1.051E-03
NOS 7653(113)	11.94	10.93	6.389E-04	.0395	7.786E-04	.0481	8.745E-04	.0541	1.051E-03
TOP 6124(169)	13.01	12.00	1.793E-03	.1109	2.219E-03	.1372	2.517E-03	.1556	2.940E-03
US 924(113)	13.01	12.00	6.096E-04	.0377	7.429E-04	.0459	8.344E-04	.0516	1.002E-03
HOT 3254(113)	13.01	12.00	6.096E-04	.0377	7.429E-04	.0459	8.344E-04	.0516	1.002E-03
NOS 7654(113)	13.01	12.00	6.096E-04	.0377	7.429E-04	.0459	8.344E-04	.0516	1.002E-03
TOP 6125(169)	14.12	13.10	1.716E-03	.1061	2.123E-03	.1313	2.409E-03	.1489	2.814E-03
US 925(113)	14.12	13.10	5.835E-04	.0361	7.110E-04	.0440	7.985E-04	.0494	9.593E-04
HOT 3255(113)	14.12	13.10	5.835E-04	.0361	7.110E-04	.0440	7.985E-04	.0494	9.593E-04
NOS 7655(113)	14.12	13.10	5.835E-04	.0361	7.110E-04	.0440	7.985E-04	.0494	9.593E-04

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
22	1	7.95	211.2	1279	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	MREF (R= .04 FT)	STREF (R= .04 FT)
93.8	.023	.997	3772	2.017E-05	7.549E-08	1.008E 06	1.617E-02	2.680E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	78	.0486	4.723E-02	4.3459E-02
OP SIDE(OS)	8494	113	78	.0486	4.723E-02	4.3459E-02
BOTTOM(BOT)	7671	113	78	.0486	4.723E-02	4.3459E-02
TOP(TOP)	8377	169	78	.0515	1.228E-01	1.2065E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 6126(169)	15.19	14.18	1.650E-03	.1020	2.041E-03	.1262	2.316E-03	.1432	2.705E-03
OS 926(113)	15.19	14.18	5.609E-04	.0347	6.835E-04	.0423	7.676E-04	.0475	9.222E-04
HOT 3256(113)	15.19	14.18	5.609E-04	.0347	6.835E-04	.0423	7.676E-04	.0475	9.222E-04
NOS 7656(113)	15.19	14.18	5.609E-04	.0347	6.835E-04	.0423	7.676E-04	.0475	9.222E-04
HOT 3257(113)	16.27	15.26	5.407E-04	.0334	6.589E-04	.0407	7.401E-04	.0457	8.882E-04
TOP 6127(169)	16.29	15.28	1.589E-03	.0982	1.966E-03	.1215	2.231E-03	.1379	2.684E-03
OS 927(113)	16.29	15.28	5.403E-04	.0334	6.584E-04	.0407	7.395E-04	.0457	8.879E-04
NOS 7657(113)	16.29	15.28	5.403E-04	.0334	6.584E-04	.0407	7.395E-04	.0457	8.879E-04
TOP 6128(169)	17.37	16.36	1.536E-03	.0950	1.901E-03	.1175	2.156E-03	.1333	2.517E-03
OS 928(113)	17.37	16.36	5.222E-04	.0323	6.363E-04	.0393	7.147E-04	.0442	8.583E-04
HOT 3258(113)	17.37	16.36	5.222E-04	.0323	6.363E-04	.0393	7.147E-04	.0442	8.583E-04
NOS 7658(113)	17.37	16.36	5.222E-04	.0323	6.363E-04	.0393	7.147E-04	.0442	8.583E-04
TOP 6129(169)	18.45	17.43	1.488E-03	.0920	1.841E-03	.1138	2.089E-03	.1291	2.437E-03
OS 929(113)	18.45	17.43	5.058E-04	.0313	6.164E-04	.0381	6.923E-04	.0428	8.309E-04
HOT 3259(113)	18.45	17.43	5.058E-04	.0313	6.164E-04	.0381	6.923E-04	.0428	8.309E-04
NOS 7659(113)	18.45	17.43	5.058E-04	.0313	6.164E-04	.0381	6.923E-04	.0428	8.309E-04
OS 930(113)	19.52	18.51	4.909E-04	.0303	5.982E-04	.0370	6.719E-04	.0415	8.065E-04
TOP 6130(169)	19.55	18.54	1.443E-03	.0892	1.785E-03	.1103	2.026E-03	.1252	2.364E-03
HOT 3260(113)	19.55	18.54	4.906E-04	.0303	5.978E-04	.0369	6.714E-04	.0415	8.059E-04
NOS 7660(113)	19.55	18.54	4.906E-04	.0303	5.978E-04	.0369	6.714E-04	.0415	8.059E-04
TOP 6131(169)	20.62	19.61	1.403E-03	.0867	1.736E-03	.1072	1.969E-03	.1216	2.296E-03
OS 931(113)	20.62	19.61	4.769E-04	.0295	5.812E-04	.0359	6.528E-04	.0403	7.827E-04
HOT 3261(113)	20.62	19.61	4.769E-04	.0295	5.812E-04	.0359	6.528E-04	.0403	7.827E-04
NOS 7661(113)	20.62	19.61	4.769E-04	.0295	5.812E-04	.0359	6.528E-04	.0403	7.827E-04
HOT 3262(113)	21.70	20.69	4.644E-04	.0287	5.659E-04	.0350	6.356E-04	.0393	7.621E-04

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NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
22	1	7.95	211.7	1279	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.8	.023	.995	3772	2.020E-05	7.550E-08	1.009E 06	1.619E-02	2.678E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	78	.0486	4.723E-02	4.3459E-02
OP SIDE(OS)	8494	113	78	.0486	4.723E-02	4.3459E-02
BOTTOM(BOT)	7671	113	78	.0486	4.723E-02	4.3459E-02
TOP(TOP)	8377	169	78	.0515	1.228E-01	1.2065E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 6132(169)	21.72	20.71	1.365E-03	.0843	1.689E-03	.1043	1.916E-03	.1184	2.234E-03
OS 932(113)	21.72	20.71	4.641E-04	.0287	5.655E-04	.0349	6.352E-04	.0392	7.617E-04
NOS 7662(113)	21.72	20.71	4.641E-04	.0287	5.655E-04	.0349	6.352E-04	.0392	7.617E-04
TOP 6133(169)	22.80	21.79	1.331E-03	.0822	1.647E-03	.1017	1.868E-03	.1154	2.178E-03
OS 933(113)	22.80	21.79	4.525E-04	.0279	5.514E-04	.0341	6.193E-04	.0382	7.426E-04
BOT 3263(113)	22.80	21.79	4.525E-04	.0279	5.514E-04	.0341	6.193E-04	.0382	7.426E-04
NOS 7663(113)	22.80	21.79	4.525E-04	.0279	5.514E-04	.0341	6.193E-04	.0382	7.426E-04
OS 934(113)	23.88	22.87	4.417E-04	.0273	5.382E-04	.0332	6.045E-04	.0373	7.249E-04
BOT 3264(113)	23.88	22.87	4.417E-04	.0273	5.382E-04	.0332	6.045E-04	.0373	7.249E-04
NOS 7664(113)	23.88	22.87	4.417E-04	.0273	5.382E-04	.0332	6.045E-04	.0373	7.249E-04
TOP 6134(169)	23.90	22.89	1.299E-03	.0802	1.607E-03	.0992	1.823E-03	.1126	2.124E-03
BOT 3265(113)	24.95	23.94	4.317E-04	.0266	5.260E-04	.0325	5.908E-04	.0365	7.078E-04
TOP 6135(169)	24.98	23.97	1.269E-03	.0784	1.570E-03	.0970	1.781E-03	.1100	2.077E-03
OS 935(113)	24.98	23.97	4.314E-04	.0266	5.257E-04	.0325	5.905E-04	.0365	7.081E-04
NOS 7665(113)	24.98	23.97	4.314E-04	.0266	5.257E-04	.0325	5.905E-04	.0365	7.081E-04
TOP 6136(169)	26.05	25.04	1.242E-03	.0767	1.536E-03	.0948	1.743E-03	.1076	2.030E-03
OS 936(113)	26.05	25.04	4.221E-04	.0261	5.143E-04	.0318	5.777E-04	.0357	6.921E-04
BOT 3266(113)	26.05	25.04	4.221E-04	.0261	5.143E-04	.0318	5.777E-04	.0357	6.921E-04
NOS 7666(113)	26.05	25.04	4.221E-04	.0261	5.143E-04	.0318	5.777E-04	.0357	6.921E-04
TOP 6137(169)	27.13	26.12	1.216E-03	.0751	1.504E-03	.0929	1.706E-03	.1054	1.988E-03
OS 937(113)	27.13	26.12	4.133E-04	.0255	5.036E-04	.0311	5.656E-04	.0349	6.780E-04
BOT 3267(113)	27.13	26.12	4.133E-04	.0255	5.036E-04	.0311	5.656E-04	.0349	6.780E-04
NOS 7667(113)	27.13	26.12	4.133E-04	.0255	5.036E-04	.0311	5.656E-04	.0349	6.780E-04
TOP 6138(169)	28.23	27.22	1.191E-03	.0735	1.473E-03	.0910	1.672E-03	.1032	1.947E-03
OS 938(113)	28.23	27.22	4.048E-04	.0250	4.933E-04	.0305	5.541E-04	.0342	6.638E-04
BOT 3268(113)	28.23	27.22	4.048E-04	.0250	4.933E-04	.0305	5.541E-04	.0342	6.638E-04
NOS 7668(113)	28.23	27.22	4.048E-04	.0250	4.933E-04	.0305	5.541E-04	.0342	6.638E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

3/29/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
22	1	7.95	211.9	1279	24.98	5.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.8	.023	1.000	3773	2.022E-05	7.551E-08	1.010E 06	1.620E-02	2.677E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7271	113	78	.0486	4.723E-02	4.3459E-02
OP SIDE(OS)	8494	113	78	.0486	4.723E-02	4.3459E-02
BOTTOM(BOT)	7671	113	78	.0486	4.723E-02	4.3459E-02
TOP(TOP)	8377	169	78	.0515	1.228E-01	1.2065E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 6139(169)	29.31	28.30	1.168E-03	.0721	1.445E-03	.0892	1.639E-03	.1012	1.909E-03
OS 939(113)	29.31	28.30	3.970E-04	.0245	4.838E-04	.0299	5.434E-04	.0335	6.508E-04
BOT 3269(113)	29.31	28.30	3.970E-04	.0245	4.838E-04	.0299	5.434E-04	.0335	6.508E-04
NOS 7669(113)	29.31	28.30	3.970E-04	.0245	4.838E-04	.0299	5.434E-04	.0335	6.508E-04
TOP 6140(169)	30.38	29.37	1.146E-03	.0708	1.418E-03	.0875	1.609E-03	.0993	1.873E-03
BOT 3270(113)	30.38	29.37	3.897E-04	.0241	4.749E-04	.0293	5.334E-04	.0329	6.387E-04
OS 940(113)	30.41	29.40	3.895E-04	.0240	4.747E-04	.0293	5.332E-04	.0329	6.384E-04
NOS 7670(113)	30.41	29.40	3.895E-04	.0240	4.747E-04	.0293	5.332E-04	.0329	6.384E-04
TOP 6141(169)	31.49	30.47	1.126E-03	.0695	1.392E-03	.0859	1.580E-03	.0975	1.838E-03
OS 941(113)	31.49	30.47	3.826E-04	.0236	4.662E-04	.0288	5.237E-04	.0323	6.268E-04
BOT 3271(113)	31.49	30.47	3.826E-04	.0236	4.662E-04	.0288	5.237E-04	.0323	6.268E-04
NOS 7671(113)	31.49	30.47	3.826E-04	.0236	4.662E-04	.0288	5.237E-04	.0323	6.268E-04
TOP 6142(169)	32.56	31.55	1.106E-03	.0683	1.368E-03	.0845	1.553E-03	.0958	1.807E-03
OS 942(113)	32.56	31.55	3.760E-04	.0232	4.582E-04	.0283	5.146E-04	.0318	6.163E-04
BOT 3272(113)	32.56	31.55	3.760E-04	.0232	4.582E-04	.0283	5.146E-04	.0318	6.163E-04
NOS 7672(113)	32.56	31.55	3.760E-04	.0232	4.582E-04	.0283	5.146E-04	.0318	6.163E-04
TOP 6143(169)	33.64	32.63	1.088E-03	.0671	1.346E-03	.0830	1.527E-03	.0942	1.775E-03
OS 943(113)	33.64	32.63	3.698E-04	.0228	4.506E-04	.0278	5.061E-04	.0312	6.052E-04
BOT 3273(113)	33.66	32.65	3.696E-04	.0228	4.504E-04	.0278	5.059E-04	.0312	6.058E-04
NOS 7673(113)	33.66	32.65	3.696E-04	.0228	4.504E-04	.0278	5.059E-04	.0312	6.058E-04
TOP 6144(169)	34.74	33.73	1.070E-03	.0660	1.324E-03	.0817	1.502E-03	.0927	1.747E-03
OS 944(113)	34.74	33.73	3.637E-04	.0224	4.432E-04	.0273	4.978E-04	.0307	5.958E-04
BOT 3274(113)	34.74	33.73	3.637E-04	.0224	4.432E-04	.0273	4.978E-04	.0307	5.958E-04
NOS 7674(113)	34.74	33.73	3.637E-04	.0224	4.432E-04	.0273	4.978E-04	.0307	5.958E-04
TOP 6145(169)	35.82	34.80	1.053E-03	.0650	1.303E-03	.0804	1.478E-03	.0912	1.720E-03
OS 945(113)	35.82	34.80	3.580E-04	.0221	4.363E-04	.0269	4.900E-04	.0302	5.865E-04
BOT 3275(113)	35.82	34.80	3.580E-04	.0221	4.363E-04	.0269	4.900E-04	.0302	5.865E-04
NOS 7675(113)	35.82	34.80	3.580E-04	.0221	4.363E-04	.0269	4.900E-04	.0302	5.865E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
22	1	7.95	212.1	1279	24.98	5.02	30.00	0	0

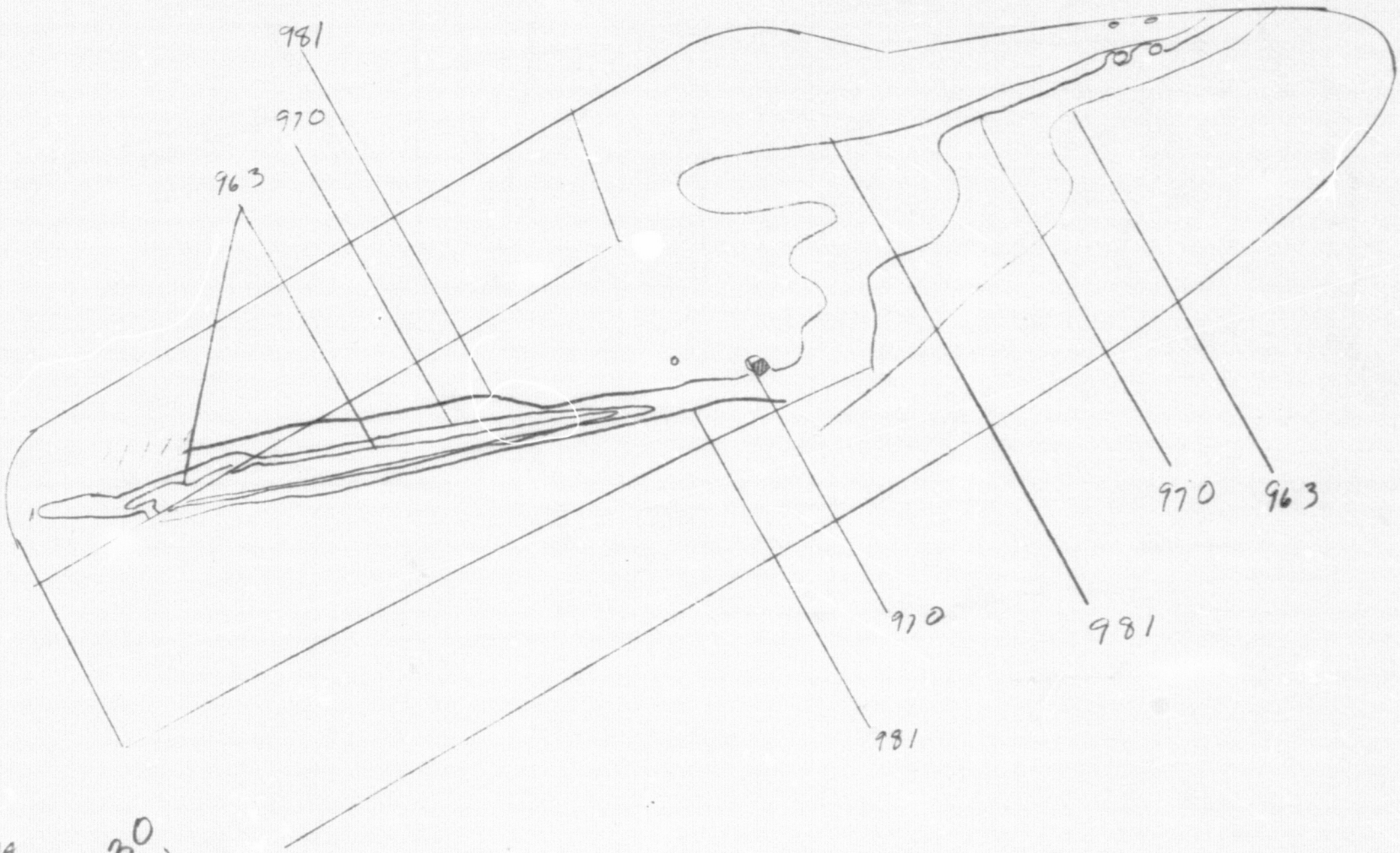
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.8	.023	1.001	3773	2.024E-05	7.551E-08	1.011E 06	1.621E-02	2.676E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCKK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7371	113	78	.0486	4.723E-02	4.3459E-02
OP SIDE(OS)	8494	113	78	.0486	4.723E-02	4.3459E-02
BOTTOM(BOT)	7671	113	78	.0486	4.723E-02	4.3459E-02
TOP(TOP)	8377	169	78	.0515	1.228E-01	1.2065E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
BOT 3276(113)	36.89	35.98	3.526E-04	.0218	4.297E-04	.0265	4.826E-04	.0298	5.773E-04
TOP 6146(169)	36.92	35.91	1.037E-03	.0640	1.283E-03	.0792	1.455E-03	.0898	1.693E-03
OS 946(113)	36.92	35.91	3.525E-04	.0218	4.295E-04	.0265	4.824E-04	.0298	5.774E-04
NOS 7676(113)	36.92	35.91	3.525E-04	.0218	4.295E-04	.0265	4.824E-04	.0298	5.774E-04
TOP 6147(169)	37.99	36.98	1.022E-03	.0630	1.264E-03	.0780	1.434E-03	.0885	1.668E-03
OS 947(113)	37.99	36.98	3.473E-04	.0214	4.232E-04	.0261	4.754E-04	.0293	5.687E-04
BOT 3277(113)	37.99	36.98	3.473E-04	.0214	4.232E-04	.0261	4.754E-04	.0293	5.687E-04
NOS 7677(113)	37.99	36.98	3.473E-04	.0214	4.232E-04	.0261	4.754E-04	.0293	5.687E-04
	39.02		MODEL HAS LEFT CENTERLINE						
TOP 6148(169)	39.07	38.06	1.007E-03	.0621	1.246E-03	.0769	1.414E-03	.0872	1.644E-03
OS 948(113)	39.07	38.06	3.424E-04	.0211	4.172E-04	.0257	4.686E-04	.0289	5.606E-04
BOT 3278(113)	39.07	38.06	3.424E-04	.0211	4.172E-04	.0257	4.686E-04	.0289	5.606E-04
NOS 7678(113)	39.09	38.08	3.423E-04	.0211	4.171E-04	.0257	4.684E-04	.0289	5.607E-04
TOP 6149(169)	40.17	39.16	9.929E-04	.0612	1.228E-03	.0758	1.394E-03	.0860	1.620E-03
OS 949(113)	40.17	39.16	3.375E-04	.0208	4.113E-04	.0254	4.619E-04	.0285	5.524E-04
BOT 3279(113)	40.17	39.16	3.375E-04	.0208	4.113E-04	.0254	4.619E-04	.0285	5.524E-04
NOS 7679(113)	40.17	39.16	3.375E-04	.0208	4.113E-04	.0254	4.619E-04	.0285	5.524E-04

8377
GP23

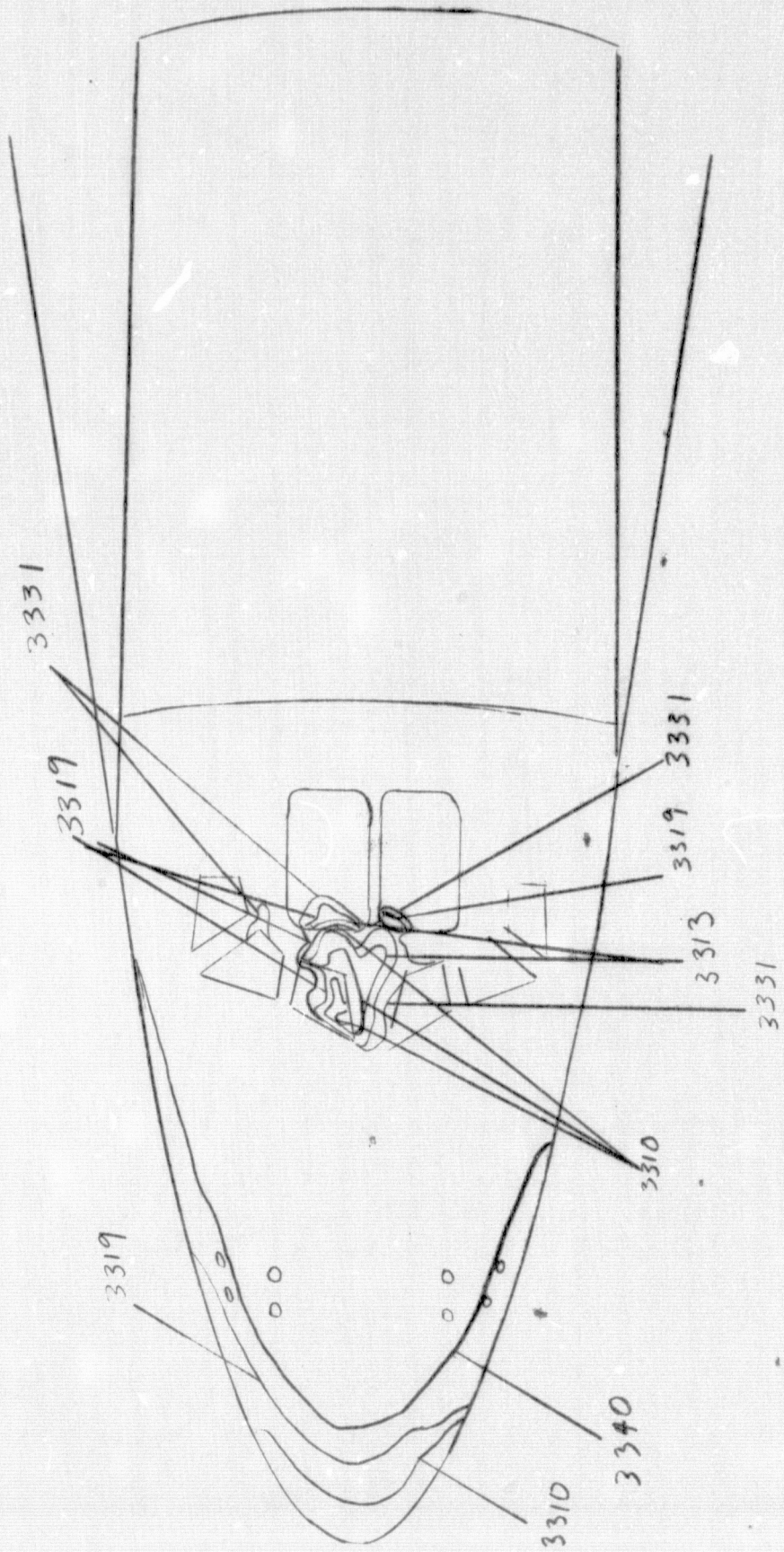
REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



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CRP 23

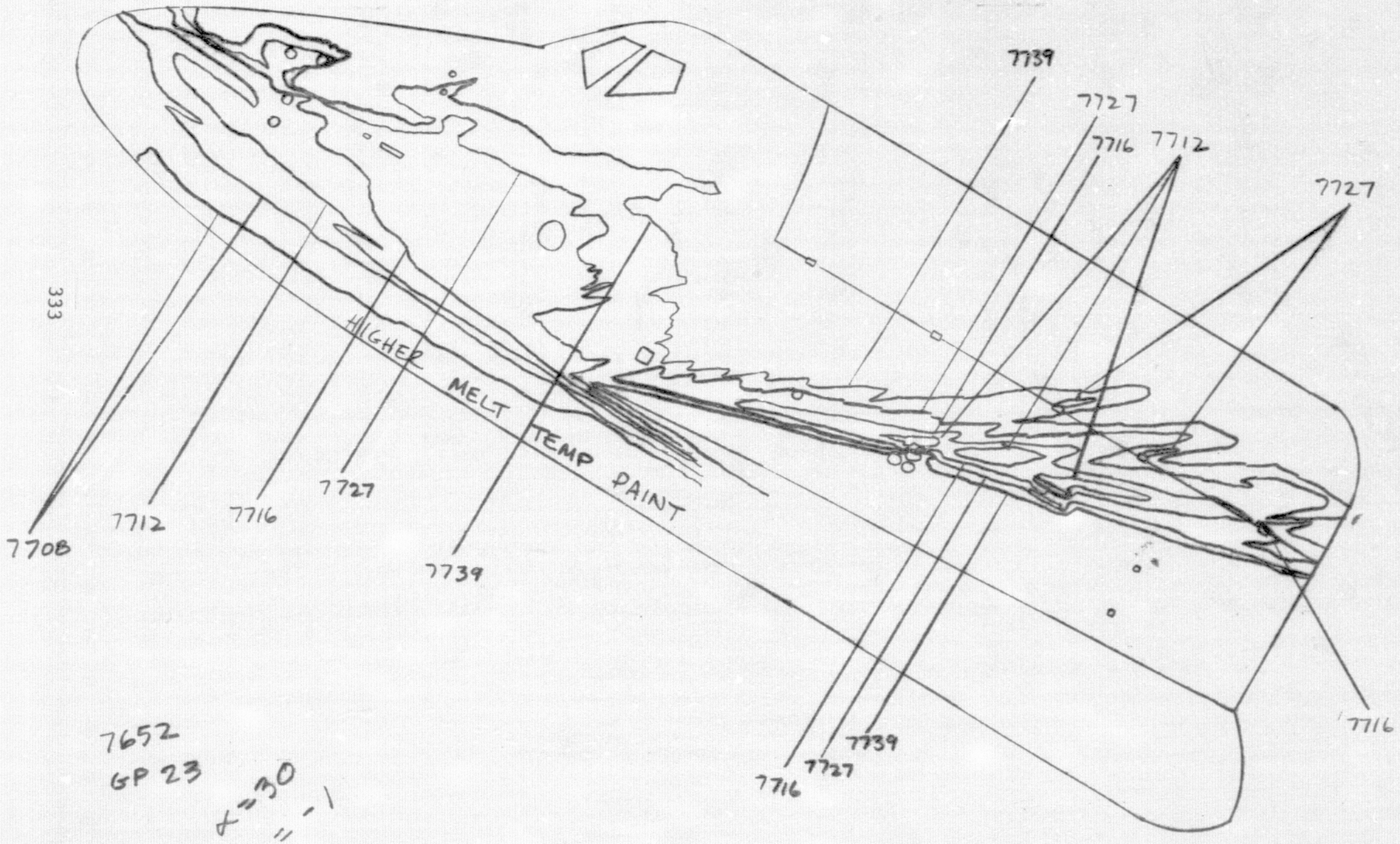
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REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



8037
GRP 23

OH-50A



7652
GP 23
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3/29/74

NASA-RI OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
23	1	7.95	213.2	1269	30.00	-.01	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.0	.023	1.006	3757	2.051E-05	7.489E-08	1.029E 06	1.623E-02	2.656E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	113	79	.0486	0	0
OP SIDE(OS)	8494	113	79	.0486	0	0
HOTTOM(BOT)	8037	113	79	.0486	0	0
TOP(TOP)	8377	169	79	.0515	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 6150(169)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 950(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
HO 3305(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 7705(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 6151(169)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 951(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 3306(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7706(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 6152(169)	2.18	1.17	5.782E-03	.3562	7.168E-03	.4416	8.143E-03	.5016	9.352E-03
OS 952(113)	2.18	1.17	1.930E-03	.1189	2.355E-03	.1451	2.646E-03	.1630	3.132E-03
HOT 3307(113)	2.18	1.17	1.930E-03	.1189	2.355E-03	.1451	2.646E-03	.1630	3.132E-03
NOS 7707(113)	2.18	1.17	1.930E-03	.1189	2.355E-03	.1451	2.646E-03	.1630	3.132E-03
TOP 6153(169)	3.25	2.24	4.169E-03	.2567	5.169E-03	.3183	5.872E-03	.3615	6.737E-03
OS 953(113)	3.28	2.27	1.384E-03	.0853	1.689E-03	.1040	1.898E-03	.1169	2.245E-03
HOT 3308(113)	3.28	2.27	1.384E-03	.0853	1.689E-03	.1040	1.898E-03	.1169	2.245E-03
NOS 7708(113)	3.28	2.27	1.384E-03	.0853	1.689E-03	.1040	1.898E-03	.1169	2.245E-03
TOP 6154(169)	4.36	3.34	3.414E-03	.2103	4.233E-03	.2607	4.808E-03	.2961	5.520E-03
OS 954(113)	4.36	3.34	1.140E-03	.0702	1.391E-03	.0857	1.563E-03	.0962	1.848E-03
HOT 3309(113)	4.36	3.34	1.140E-03	.0702	1.391E-03	.0857	1.563E-03	.0962	1.848E-03
NOS 7709(113)	4.36	3.34	1.140E-03	.0702	1.391E-03	.0857	1.563E-03	.0962	1.848E-03
TOP 6155(169)	5.43	4.42	2.970E-03	.1829	3.682E-03	.2267	4.182E-03	.2575	4.798E-03
HOT 3310(113)	5.43	4.42	9.914E-04	.0610	1.210E-03	.0745	1.359E-03	.0837	1.607E-03
OS 955(113)	5.46	4.44	9.887E-04	.0609	1.206E-03	.0743	1.355E-03	.0834	1.602E-03
NOS 7710(113)	5.46	4.44	9.887E-04	.0609	1.206E-03	.0743	1.355E-03	.0834	1.602E-03
TOP 6156(169)	6.53	5.52	2.657E-03	.1636	3.294E-03	.2028	3.742E-03	.2304	4.293E-03
OS 956(113)	6.53	5.52	8.871E-04	.0546	1.082E-03	.0666	1.216E-03	.0749	1.438E-03
HOT 3311(113)	6.53	5.52	8.871E-04	.0546	1.082E-03	.0666	1.216E-03	.0749	1.438E-03
NOS 7711(113)	6.53	5.52	8.871E-04	.0546	1.082E-03	.0666	1.216E-03	.0749	1.438E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
23	1	7.95	214.2	1269	30.00	-.01	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.0	.023	1.011	3757	2.041E-05	7.488E-08	1.034E 06	1.626E-02	2.649E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	113	79	.0486	4.660E-02	4.2887E-02
OP SIDE(OS)	8494	113	79	.0486	4.660E-02	4.2887E-02
HOTTOM(BOT)	8037	113	79	.0486	4.660E-02	4.2887E-02
TOP(TOP)	8377	169	79	.0515	1.233E-01	1.2122E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6164(169)	15.22	14.21	1.656E-03	.1018	2.054E-03	.1263	2.333E-03	.1434	2.660E-03
OS 964(113)	15.22	14.21	5.530E-03	.0340	6.747E-04	.0415	7.581E-04	.0466	8.937E-04
HOT 3319(113)	15.22	14.21	5.530E-04	.0340	6.747E-04	.0415	7.581E-04	.0466	8.937E-04
NOS 7719(113)	15.22	14.21	5.530E-04	.0340	6.747E-04	.0415	7.581E-04	.0466	8.937E-04
HOT 3320(113)	16.29	15.28	5.332E-04	.0328	6.505E-04	.0400	7.309E-04	.0449	8.608E-04
TOP 6165(169)	16.32	15.31	1.596E-03	.0981	1.978E-03	.1216	2.247E-03	.1382	2.571E-03
OS 965(113)	16.32	15.31	5.327E-04	.0328	6.500E-04	.0400	7.303E-04	.0449	8.609E-04
NOS 7720(113)	16.32	15.31	5.327E-04	.0328	6.500E-04	.0400	7.303E-04	.0449	8.609E-04
TOP 6166(169)	17.40	16.38	1.542E-03	.0948	1.912E-03	.1175	2.172E-03	.1335	2.483E-03
OS 966(113)	17.40	16.38	5.149E-04	.0316	6.283E-04	.0386	7.059E-04	.0434	8.314E-04
HOT 3321(113)	17.40	16.38	5.149E-04	.0316	6.283E-04	.0386	7.059E-04	.0434	8.314E-04
NOS 7721(113)	17.40	16.38	5.149E-04	.0316	6.283E-04	.0386	7.059E-04	.0434	8.314E-04
TOP 6167(169)	18.47	17.46	1.494E-03	.0918	1.852E-03	.1138	2.104E-03	.1293	2.405E-03
OS 967(113)	18.47	17.46	4.988E-04	.0307	6.086E-04	.0374	6.838E-04	.0420	8.053E-04
HOT 3322(113)	18.47	17.46	4.988E-04	.0307	6.086E-04	.0374	6.838E-04	.0420	8.053E-04
NOS 7722(113)	18.47	17.46	4.988E-04	.0307	6.086E-04	.0374	6.838E-04	.0420	8.053E-04
HOT 3323(113)	19.55	18.54	4.841E-04	.0298	5.907E-04	.0363	6.637E-04	.0408	7.816E-04
TOP 6168(169)	19.57	18.56	1.449E-03	.0891	1.797E-03	.1104	2.041E-03	.1254	2.332E-03
OS 968(113)	19.57	18.56	4.838E-04	.0297	5.903E-04	.0363	6.632E-04	.0408	7.811E-04
NOS 7723(113)	19.57	18.56	4.838E-04	.0297	5.903E-04	.0363	6.632E-04	.0408	7.811E-04
TOP 6169(169)	20.65	19.64	1.409E-03	.0866	1.747E-03	.1073	1.984E-03	.1219	2.268E-03
OS 969(113)	20.65	19.64	4.703E-04	.0289	5.739E-04	.0353	6.448E-04	.0396	7.594E-04
HOT 3324(113)	20.65	19.64	4.703E-04	.0289	5.739E-04	.0353	6.448E-04	.0396	7.594E-04
NOS 7724(113)	20.65	19.64	4.703E-04	.0289	5.739E-04	.0353	6.448E-04	.0396	7.594E-04
TOP 6170(169)	21.72	20.71	1.372E-03	.0843	1.701E-03	.1045	1.932E-03	.1187	2.207E-03
OS 970(113)	21.72	20.71	4.580E-04	.0281	5.588E-04	.0343	6.278E-04	.0386	7.390E-04
HOT 3325(113)	21.72	20.71	4.580E-04	.0281	5.588E-04	.0343	6.278E-04	.0386	7.390E-04
NOS 7725(113)	21.72	20.71	4.580E-04	.0281	5.588E-04	.0343	6.278E-04	.0386	7.390E-04

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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
23	1	7.95	213.6	1269	30.00	-.01	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.0	.023	1.008	3757	2.055E-05	7.488E-08	1.031E 06	1.624E-02	2.653E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	113	79	.0486	4.660E-02	4.2887E-02
OP SIDE(OS)	8494	113	79	.0486	4.660E-02	4.2887E-02
BOTTOM(BOT)	8037	113	79	.0486	4.660E-02	4.2887E-02
TOP(TOP)	8377	169	79	.0515	1.233E-01	1.2122E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6157(169)	7.61	6.60	2.431E-03	.1496	3.013E-03	.1855	3.423E-03	.2107	3.924E-03
OS 957(113)	7.61	6.60	8.115E-04	.0499	9.901E-04	.0609	1.112E-03	.0685	1.314E-03
BOT 3312(113)	7.61	6.60	8.115E-04	.0499	9.901E-04	.0609	1.112E-03	.0685	1.314E-03
NOS 7712(113)	7.61	6.60	8.115E-04	.0499	9.901E-04	.0609	1.112E-03	.0685	1.314E-03
TOP 6158(169)	8.71	7.70	2.250E-03	.1385	2.790E-03	.1717	3.169E-03	.1950	3.632E-03
OS 958(113)	8.71	7.70	7.512E-04	.0462	9.166E-04	.0564	1.030E-03	.0634	1.216E-03
BOT 3313(113)	8.71	7.70	7.512E-04	.0462	9.166E-04	.0564	1.030E-03	.0634	1.216E-03
NOS 7713(113)	8.71	7.70	7.512E-04	.0462	9.166E-04	.0564	1.030E-03	.0634	1.216E-03
TOP 6159(169)	9.79	8.77	2.108E-03	.1297	2.613E-03	.1608	2.968E-03	.1826	3.400E-03
OS 959(113)	9.79	8.77	7.036E-04	.0433	8.585E-04	.0528	9.646E-04	.0594	1.139E-03
BOT 3314(113)	9.79	8.77	7.036E-04	.0433	8.585E-04	.0528	9.646E-04	.0594	1.139E-03
NOS 7714(113)	9.79	8.77	7.036E-04	.0433	8.585E-04	.0528	9.646E-04	.0594	1.139E-03
BOT 3315(113)	10.86	9.85	6.641E-04	.0409	8.103E-04	.0498	9.104E-04	.0560	1.074E-03
TOP 6160(169)	10.89	9.88	1.987E-03	.1222	2.463E-03	.1515	2.798E-03	.1721	3.204E-03
OS 960(113)	10.89	9.88	6.632E-04	.0408	8.093E-04	.0498	9.092E-04	.0559	1.073E-03
NOS 7715(113)	10.89	9.88	6.632E-04	.0408	8.093E-04	.0498	9.092E-04	.0559	1.073E-03
TOP 6161(169)	11.96	10.95	1.696E-03	.1160	2.339E-03	.1439	2.657E-03	.1634	3.042E-03
OS 961(113)	11.96	10.95	6.298E-04	.0387	7.685E-04	.0473	8.634E-04	.0531	1.019E-03
BOT 3316(113)	11.96	10.95	6.298E-04	.0387	7.685E-04	.0473	8.634E-04	.0531	1.019E-03
NOS 7716(113)	11.96	10.95	6.298E-04	.0387	7.685E-04	.0473	8.634E-04	.0531	1.019E-03
TOP 6162(169)	13.04	12.03	1.800E-03	.1107	2.232E-03	.1373	2.535E-03	.1559	2.902E-03
OS 962(113)	13.04	12.03	6.010E-04	.0370	7.333E-04	.0451	8.239E-04	.0507	9.717E-04
BOT 3317(113)	13.04	12.03	6.010E-04	.0370	7.333E-04	.0451	8.239E-04	.0507	9.717E-04
NOS 7717(113)	13.04	12.03	6.010E-04	.0370	7.333E-04	.0451	8.239E-04	.0507	9.717E-04
TOP 6163(169)	14.14	13.13	1.723E-03	.1059	2.136E-03	.1313	2.426E-03	.1492	2.776E-03
OS 963(113)	14.14	13.13	5.752E-04	.0354	7.019E-04	.0432	7.886E-04	.0485	9.296E-04
BOT 3318(113)	14.14	13.13	5.752E-04	.0354	7.019E-04	.0432	7.886E-04	.0485	9.296E-04
NOS 7718(113)	14.14	13.13	5.752E-04	.0354	7.019E-04	.0432	7.886E-04	.0485	9.296E-04

NASA-RI OH50
VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
23	1	7.95	214.5	1268	30.00	-.01	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.0	.023	1.012	3756	2.064E-05	7.487E-08	1.036E 06	1.627E-02	2.647E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	113	79	.0486	4.660E-02	4.2887E-02
OP SIDE(OS)	8494	113	79	.0486	4.660E-02	4.2887E-02
BOTTOM(BOT)	8037	113	79	.0486	4.660E-02	4.2887E-02
TOP(TOP)	8377	169	79	.0515	1.233E-01	1.2122E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
BOT 3326(113)	22.80	21.79	4.465E-04	.0274	5.448E-04	.0335	6.121E-04	.0376	7.206E-04
TOP 6171(169)	22.83	21.81	1.337E-03	.0821	1.657E-03	.1018	1.882E-03	.1156	2.149E-03
OS 971(113)	22.83	21.81	4.463E-04	.0274	5.445E-04	.0334	6.118E-04	.0376	7.198E-04
NOS 7726(113)	22.83	21.81	4.463E-04	.0274	5.445E-04	.0334	6.118E-04	.0376	7.198E-04
TOP 6172(169)	23.90	22.89	1.305E-03	.0802	1.618E-03	.0994	1.838E-03	.1129	2.098E-03
OS 972(113)	23.90	22.89	4.356E-04	.0268	5.315E-04	.0327	5.972E-04	.0367	7.027E-04
BOT 3327(113)	23.90	22.89	4.356E-04	.0268	5.315E-04	.0327	5.972E-04	.0367	7.027E-04
NOS 7727(113)	23.90	22.89	4.356E-04	.0268	5.315E-04	.0327	5.972E-04	.0367	7.027E-04
TOP 6173(169)	24.98	23.97	1.275E-03	.0783	1.581E-03	.0971	1.796E-03	.1103	2.050E-03
OS 973(113)	24.98	23.97	4.257E-04	.0261	5.195E-04	.0319	5.837E-04	.0358	6.864E-04
BOT 3328(113)	24.98	23.97	4.257E-04	.0261	5.195E-04	.0319	5.837E-04	.0358	6.864E-04
NOS 7728(113)	24.98	23.97	4.257E-04	.0261	5.195E-04	.0319	5.837E-04	.0358	6.864E-04
TOP 6174(169)	26.08	25.07	1.247E-03	.0766	1.546E-03	.0949	1.756E-03	.1078	2.003E-03
OS 974(113)	26.08	25.07	4.163E-04	.0256	5.079E-04	.0312	5.707E-04	.0350	6.708E-04
BOT 3329(113)	26.08	25.07	4.163E-04	.0256	5.079E-04	.0312	5.707E-04	.0350	6.708E-04
NOS 7729(113)	26.08	25.07	4.163E-04	.0256	5.079E-04	.0312	5.707E-04	.0350	6.708E-04
TOP 6175(169)	27.16	26.14	1.221E-03	.0750	1.514E-03	.0930	1.719E-03	.1056	1.962E-03
OS 975(113)	27.16	26.14	4.076E-04	.0250	4.974E-04	.0305	5.588E-04	.0343	6.572E-04
BOT 3330(113)	27.16	26.14	4.076E-04	.0250	4.974E-04	.0305	5.588E-04	.0343	6.572E-04
NOS 7730(113)	27.16	26.14	4.076E-04	.0250	4.974E-04	.0305	5.588E-04	.0343	6.572E-04
TOP 6176(169)	28.23	27.22	1.197E-03	.0735	1.483E-03	.0911	1.685E-03	.1035	1.922E-03
OS 976(113)	28.23	27.22	3.995E-04	.0245	4.874E-04	.0299	5.477E-04	.0336	6.438E-04
BOT 3331(113)	28.23	27.22	3.995E-04	.0245	4.874E-04	.0299	5.477E-04	.0336	6.438E-04
NOS 7731(113)	28.23	27.22	3.995E-04	.0245	4.874E-04	.0299	5.477E-04	.0336	6.438E-04
TOP 6177(169)	29.33	28.32	1.173E-03	.0720	1.454E-03	.0893	1.652E-03	.1015	1.886E-03
OS 977(113)	29.33	28.32	3.916E-04	.0241	4.779E-04	.0294	5.369E-04	.0330	6.314E-04
BOT 3332(113)	29.33	28.32	3.916E-04	.0241	4.779E-04	.0294	5.369E-04	.0330	6.314E-04
NOS 7732(113)	29.33	28.32	3.916E-04	.0241	4.779E-04	.0294	5.369E-04	.0330	6.314E-04

REPRODUCED AT GOVT EXPENSE
ORIGINAL PAGE IS POOR

3/29/74

NASA-RI OH53

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
23	1	7.95	214.7	1268	30.00	-.01	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.0	.023	1.013	3756	2.066E-05	7.487E-08	1.037E 06	1.628E-02	2.646E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	113	79	.0486	4.660E-02	4.2887E-02
UP SIDE(OS)	8494	113	79	.0486	4.660E-02	4.2887E-02
BOTTOM(BOT)	8037	113	79	.0486	4.660E-02	4.2887E-02
TOP(TOP)	8377	169	79	.0515	1.233E-01	1.2122E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6178(169)	30.41	29.40	1.151E-03	.0707	1.427E-03	.0877	1.622E-03	.0996	1.850E-03
OS 978(113)	30.41	29.40	3.844E-04	.0236	4.690E-04	.0288	5.270E-04	.0324	6.194E-04
BOT 3333(113)	30.41	29.40	3.844E-04	.0236	4.690E-04	.0288	5.270E-04	.0324	6.194E-04
NOS 7733(113)	30.41	29.40	3.844E-04	.0236	4.690E-04	.0288	5.270E-04	.0324	6.194E-04
OS 979(113)	31.49	30.47	3.776E-04	.0232	4.607E-04	.0283	5.176E-04	.0318	6.084E-04
BOT 3334(113)	31.49	30.47	3.776E-04	.0232	4.607E-04	.0283	5.176E-04	.0318	6.084E-04
TOP 6179(169)	31.51	30.50	1.130E-03	.0694	1.401E-03	.0861	1.592E-03	.0978	1.816E-03
NOS 7734(113)	31.51	30.50	3.774E-04	.0232	4.605E-04	.0283	5.174E-04	.0318	6.082E-04
TOP 6180(169)	32.59	31.58	1.111E-03	.0683	1.377E-03	.0846	1.565E-03	.0961	1.787E-03
OS 980(113)	32.59	31.58	3.709E-04	.0228	4.526E-04	.0278	5.085E-04	.0312	5.983E-04
BOT 3335(113)	32.59	31.58	3.709E-04	.0228	4.526E-04	.0278	5.085E-04	.0312	5.983E-04
NOS 7735(113)	32.59	31.58	3.709E-04	.0228	4.526E-04	.0278	5.085E-04	.0312	5.983E-04
TOP 6181(169)	33.66	32.65	1.093E-03	.0671	1.355E-03	.0832	1.539E-03	.0945	1.755E-03
OS 981(113)	33.66	32.65	3.648E-04	.0224	4.451E-04	.0273	5.001E-04	.0307	5.878E-04
BOT 3336(113)	33.66	32.65	3.648E-04	.0224	4.451E-04	.0273	5.001E-04	.0307	5.878E-04
NOS 7736(113)	33.66	32.65	3.648E-04	.0224	4.451E-04	.0273	5.001E-04	.0307	5.878E-04
OS 982(113)	34.74	33.73	3.589E-04	.0220	4.379E-04	.0269	4.920E-04	.0302	5.781E-04
BOT 3337(113)	34.74	33.73	3.589E-04	.0220	4.379E-04	.0269	4.920E-04	.0302	5.781E-04
TOP 6182(169)	34.76	33.75	1.075E-03	.0660	1.332E-03	.0818	1.513E-03	.0929	1.725E-03
NOS 7737(113)	34.76	33.75	3.588E-04	.0220	4.377E-04	.0269	4.918E-04	.0302	5.776E-04
TOP 6183(169)	35.84	34.83	1.054E-03	.0649	1.311E-03	.0805	1.490E-03	.0915	1.699E-03
OS 983(113)	35.84	34.83	3.532E-04	.0217	4.309E-04	.0265	4.842E-04	.0297	5.689E-04
BOT 3338(113)	35.84	34.83	3.532E-04	.0217	4.309E-04	.0265	4.842E-04	.0297	5.689E-04
NOS 7738(113)	35.84	34.83	3.532E-04	.0217	4.309E-04	.0265	4.842E-04	.0297	5.689E-04
TOP 6184(169)	36.92	35.91	1.042E-03	.0639	1.292E-03	.0793	1.467E-03	.0900	1.672E-03
OS 984(113)	36.92	35.91	3.478E-04	.0213	4.244E-04	.0260	4.769E-04	.0293	5.598E-04
BOT 3339(113)	36.92	35.91	3.478E-04	.0213	4.244E-04	.0260	4.769E-04	.0293	5.598E-04
NOS 7739(113)	36.92	35.91	3.478E-04	.0213	4.244E-04	.0260	4.769E-04	.0293	5.598E-04

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* UNCLASSIFIED *
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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
23	1	7.95	215.1	1268	30.00	-.01	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.0	.023	1.015	3757	2.070E-05	7.487E-08	1.039E 06	1.630E-02	2.643E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	113	79	.0486	4.660E-02	4.2887E-02
UP SIDE(OS)	8494	113	79	.0486	4.660E-02	4.2887E-02
HOTTOM(BOT)	8037	113	79	.0486	4.660E-02	4.2887E-02
TOP(TOP)	8377	169	79	.0515	1.233E-01	1.2122E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6185(169)	37.99	36.98	1.027E-03	.0630	1.273E-03	.0781	1.446E-03	.0888	1.649E-03
OS 985(113)	37.99	36.98	3.427E-04	.0210	4.182E-04	.0257	4.699E-04	.0288	5.521E-04
BOT 3340(113)	37.99	36.98	3.427E-04	.0210	4.182E-04	.0257	4.699E-04	.0288	5.521E-04
NOS 7740(113)	37.99	36.98	3.427E-04	.0210	4.182E-04	.0257	4.699E-04	.0288	5.521E-04
	39.04		MODEL HAS LEFT CENTERLINE						
TOP 6186(169)	39.09	38.08	1.012E-03	.0621	1.254E-03	.0770	1.425E-03	.0874	1.624E-03
OS 986(113)	39.09	38.08	3.377E-04	.0207	4.121E-04	.0253	4.630E-04	.0284	5.437E-04
BOT 3341(113)	39.09	38.08	3.377E-04	.0207	4.121E-04	.0253	4.630E-04	.0284	5.437E-04
NOS 7741(113)	39.09	38.08	3.377E-04	.0207	4.121E-04	.0253	4.630E-04	.0284	5.437E-04
TOP 6187(169)	40.17	39.16	9.976E-04	.0612	1.237E-03	.0759	1.405E-03	.0862	1.601E-03
OS 987(113)	40.17	39.16	3.331E-04	.0204	4.064E-04	.0249	4.566E-04	.0280	5.360E-04
BOT 3342(113)	40.17	39.16	3.331E-04	.0204	4.064E-04	.0249	4.566E-04	.0280	5.360E-04
NOS 7742(113)	40.17	39.16	3.331E-04	.0204	4.064E-04	.0249	4.566E-04	.0280	5.360E-04

9377

GP24

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

3/29/74

NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
24	1	7.95	211.1	1265	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.7	.023	.997	3752	2.038E-05	7.467E-08	1.024E 06	1.614E-02	2.663E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	169	82	.0515	0	0
UP SIDE(US)	8494	169	82	.0515	0	0
BOTTOM(BOT)	8037	169	82	.0515	0	0
TOP(TOP)	8377	169	82	.0515	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 6188(169)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 988(169)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 3343(169)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7743(169)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 6189(169)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 989(169)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 3344(169)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7744(169)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.78								
TOP 6190(169)	2.18	1.18	5.593E-03	.3463	6.941E-03	.4298	7.891E-03	.4885	9.116E-03
OS 990(169)	2.18	1.18	5.593E-03	.3463	6.941E-03	.4298	7.891E-03	.4885	9.116E-03
NOT 3345(169)	2.18	1.18	5.593E-03	.3463	6.941E-03	.4298	7.891E-03	.4885	9.116E-03
NOS 7745(169)	2.18	1.18	5.593E-03	.3463	6.941E-03	.4298	7.891E-03	.4885	9.116E-03
NOT 3346(169)	3.25	2.26	4.044E-03	.2504	5.020E-03	.3108	5.706E-03	.3533	6.592E-03
TOP 6191(169)	3.28	2.28	4.022E-03	.2490	4.992E-03	.3090	5.675E-03	.3513	6.553E-03
OS 991(169)	3.28	2.28	4.022E-03	.2490	4.992E-03	.3090	5.675E-03	.3513	6.553E-03
NOS 7746(169)	3.28	2.28	4.022E-03	.2490	4.992E-03	.3090	5.675E-03	.3513	6.553E-03
TOP 6192(169)	4.36	3.36	3.315E-03	.2053	4.115E-03	.2548	4.678E-03	.2896	5.404E-03
OS 992(169)	4.36	3.36	3.315E-03	.2053	4.115E-03	.2548	4.678E-03	.2896	5.404E-03
NOT 3347(169)	4.36	3.36	3.315E-03	.2053	4.115E-03	.2548	4.678E-03	.2896	5.404E-03
NOS 7747(169)	4.36	3.36	3.315E-03	.2053	4.115E-03	.2548	4.678E-03	.2896	5.404E-03
TOP 6193(169)	5.43	4.43	2.885E-03	.1786	3.581E-03	.2216	4.071E-03	.2520	4.700E-03
OS 993(169)	5.43	4.43	2.885E-03	.1786	3.581E-03	.2216	4.071E-03	.2520	4.700E-03
NOT 3348(169)	5.43	4.43	2.885E-03	.1786	3.581E-03	.2216	4.071E-03	.2520	4.700E-03
NOS 7748(169)	5.43	4.43	2.885E-03	.1786	3.581E-03	.2216	4.071E-03	.2520	4.700E-03
TOP 6194(169)	6.51	5.51	2.588E-03	.1602	3.212E-03	.1988	3.651E-03	.2260	4.216E-03

3/29/74

NASA-RI OH50

VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREREND	ROLL-MODEL	YAW
24	1	7.95	211.6	1265	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.7	.023	.998	3751	2.042E-05	7.465E-08	1.026E 06	1.615E-02	2.661E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	169	82	.0515	1.204E-01	1.1796E-01
OP SIDE(OS)	8494	169	82	.0515	1.204E-01	1.1796E-01
BOTTOM(BOT)	8037	169	82	.0515	1.204E-01	1.1796E-01
TOP(TOP)	8377	169	82	.0515	1.204E-01	1.1796E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
OS 994(169)	6.53	5.53	2.582E-03	.1598	3.205E-03	.1984	3.643E-03	.2255	4.207E-03
NOT 3349(169)	6.53	5.53	2.582E-03	.1598	3.205E-03	.1984	3.643E-03	.2255	4.207E-03
NOS 7749(169)	6.53	5.53	2.582E-03	.1598	3.205E-03	.1984	3.643E-03	.2255	4.207E-03
TOP 6195(169)	7.61	6.61	2.363E-03	.1462	2.932E-03	.1815	3.333E-03	.2063	3.847E-03
OS 995(169)	7.61	6.61	2.363E-03	.1462	2.932E-03	.1815	3.333E-03	.2063	3.847E-03
NOT 3350(169)	7.61	6.61	2.363E-03	.1462	2.932E-03	.1815	3.333E-03	.2063	3.847E-03
NOS 7750(169)	7.61	6.61	2.363E-03	.1462	2.932E-03	.1815	3.333E-03	.2063	3.847E-03
TOP 6196(169)	8.68	7.69	2.191E-03	.1356	2.719E-03	.1683	3.091E-03	.1914	3.569E-03
OS 996(169)	8.68	7.69	2.191E-03	.1356	2.719E-03	.1683	3.091E-03	.1914	3.569E-03
NOT 3351(169)	8.68	7.69	2.191E-03	.1356	2.719E-03	.1683	3.091E-03	.1914	3.569E-03
NOS 7751(169)	8.68	7.69	2.191E-03	.1356	2.719E-03	.1683	3.091E-03	.1914	3.569E-03
TOP 6197(169)	9.79	8.79	2.049E-03	.1268	2.543E-03	.1574	2.891E-03	.1790	3.338E-03
OS 997(169)	9.79	8.79	2.049E-03	.1268	2.543E-03	.1574	2.891E-03	.1790	3.338E-03
NOT 3352(169)	9.79	8.79	2.049E-03	.1268	2.543E-03	.1574	2.891E-03	.1790	3.338E-03
NOS 7752(169)	9.79	8.79	2.049E-03	.1268	2.543E-03	.1574	2.891E-03	.1790	3.338E-03
TOP 6198(169)	10.86	9.86	1.934E-03	.1196	2.400E-03	.1485	2.729E-03	.1688	3.146E-03
OS 998(169)	10.86	9.86	1.934E-03	.1196	2.400E-03	.1485	2.729E-03	.1688	3.146E-03
NOT 3353(169)	10.86	9.86	1.934E-03	.1196	2.400E-03	.1485	2.729E-03	.1688	3.146E-03
NOS 7753(169)	10.86	9.86	1.934E-03	.1196	2.400E-03	.1485	2.729E-03	.1688	3.146E-03
NOT 3354(169)	11.94	10.94	1.837E-03	.1137	2.279E-03	.1411	2.591E-03	.1604	2.992E-03
TOP 6199(169)	11.96	10.97	1.834E-03	.1135	2.277E-03	.1409	2.588E-03	.1602	2.987E-03
OS 999(169)	11.96	10.97	1.834E-03	.1135	2.277E-03	.1409	2.588E-03	.1602	2.987E-03
NOS 7754(169)	11.96	10.97	1.834E-03	.1135	2.277E-03	.1409	2.588E-03	.1602	2.987E-03
TOP 6200(169)	13.04	12.04	1.751E-03	.1082	2.173E-03	.1343	2.470E-03	.1526	2.842E-03
OS 1000(169)	13.04	12.04	1.751E-03	.1082	2.173E-03	.1343	2.470E-03	.1526	2.842E-03
NOT 3355(169)	13.04	12.04	1.751E-03	.1082	2.173E-03	.1343	2.470E-03	.1526	2.842E-03
NOS 7755(169)	13.04	12.04	1.751E-03	.1082	2.173E-03	.1343	2.470E-03	.1526	2.842E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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3/29/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VAS26 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
24	1	7.95	212.3	1265	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.7	.023	1.002	3751	2.049E-05	7.464E-08	1.030E 06	1.618E-02	2.656E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	169	82	.0515	1.204E-01	1.1796E-01
OP SIDE(OS)	8494	169	82	.0515	1.204E-01	1.1796E-01
BOTTOM(BOT)	8037	169	82	.0515	1.204E-01	1.1796E-01
TOP(TOP)	8377	169	82	.0515	1.204E-01	1.1796E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6201(169)	14.12	13.12	1.677E-03	.1038	2.082E-03	.1288	2.366E-03	.1464	2.728E-03
OS 1001(169)	14.12	13.12	1.677E-03	.1038	2.082E-03	.1288	2.366E-03	.1464	2.728E-03
BOT 3356(169)	14.12	13.12	1.677E-03	.1038	2.082E-03	.1288	2.366E-03	.1464	2.728E-03
NOS 7756(169)	14.12	13.12	1.677E-03	.1038	2.082E-03	.1288	2.366E-03	.1464	2.728E-03
TOP 6202(169)	15.22	14.22	1.611E-03	.0997	1.999E-03	.1237	2.273E-03	.1406	2.621E-03
OS 1002(169)	15.22	14.22	1.611E-03	.0997	1.999E-03	.1237	2.273E-03	.1406	2.621E-03
BOT 3357(169)	15.22	14.22	1.611E-03	.0997	1.999E-03	.1237	2.273E-03	.1406	2.621E-03
NOS 7757(169)	15.22	14.22	1.611E-03	.0997	1.999E-03	.1237	2.273E-03	.1406	2.621E-03
TOP 6203(169)	16.29	15.30	1.553E-03	.0961	1.928E-03	.1192	2.191E-03	.1356	2.527E-03
OS 1003(169)	16.29	15.30	1.553E-03	.0961	1.928E-03	.1192	2.191E-03	.1356	2.527E-03
BOT 3358(169)	16.29	15.30	1.553E-03	.0961	1.928E-03	.1192	2.191E-03	.1356	2.527E-03
NOS 7758(169)	16.29	15.30	1.553E-03	.0961	1.928E-03	.1192	2.191E-03	.1356	2.527E-03
BOT 3359(169)	17.37	16.37	1.501E-03	.0929	1.863E-03	.1153	2.118E-03	.1310	2.442E-03
TOP 6204(169)	17.40	16.40	1.500E-03	.0928	1.862E-03	.1151	2.117E-03	.1309	2.439E-03
OS 1004(169)	17.40	16.40	1.500E-03	.0928	1.862E-03	.1151	2.117E-03	.1309	2.439E-03
NOS 7759(169)	17.40	16.40	1.500E-03	.0928	1.862E-03	.1151	2.117E-03	.1309	2.439E-03
TOP 6205(169)	18.47	17.47	1.453E-03	.0899	1.804E-03	.1116	2.050E-03	.1268	2.364E-03
OS 1005(169)	18.47	17.47	1.453E-03	.0899	1.804E-03	.1116	2.050E-03	.1268	2.364E-03
BOT 3360(169)	18.47	17.47	1.453E-03	.0899	1.804E-03	.1116	2.050E-03	.1268	2.364E-03
NOS 7760(169)	18.47	17.47	1.453E-03	.0899	1.804E-03	.1116	2.050E-03	.1268	2.364E-03
TOP 6206(169)	19.55	18.55	1.410E-03	.0872	1.751E-03	.1082	1.990E-03	.1230	2.292E-03
OS 1006(169)	19.55	18.55	1.410E-03	.0872	1.751E-03	.1082	1.990E-03	.1230	2.292E-03
BOT 3361(169)	19.55	18.55	1.410E-03	.0872	1.751E-03	.1082	1.990E-03	.1230	2.292E-03
NOS 7761(169)	19.57	18.57	1.410E-03	.0872	1.749E-03	.1082	1.989E-03	.1230	2.293E-03
TOP 6207(169)	20.65	19.65	1.370E-03	.0847	1.701E-03	.1052	1.933E-03	.1195	2.227E-03
OS 1007(169)	20.65	19.65	1.370E-03	.0847	1.701E-03	.1052	1.933E-03	.1195	2.227E-03
BOT 3362(169)	20.65	19.65	1.370E-03	.0847	1.701E-03	.1052	1.933E-03	.1195	2.227E-03
NOS 7762(169)	20.65	19.65	1.370E-03	.0847	1.701E-03	.1052	1.933E-03	.1195	2.227E-03

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3/29/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
24	1	7.95	212.1	1265	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.7	.023	1.001	3751	2.047E-05	7.465E-08	1.028E 06	1.617E-02	2.657E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	169	82	.0515	1.204E-01	1.1796E-01
OP SIDE(OS)	8496	169	82	.0515	1.204E-01	1.1796E-01
BOTTOM(BOT)	8037	169	82	.0515	1.204E-01	1.1796E-01
TOP(TOP)	8377	169	82	.0515	1.204E-01	1.1796E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6208(169)	21.72	20.73	1.334E-03	.0825	1.656E-03	.1024	1.883E-03	.1164	2.170E-03
OS 1008(169)	21.72	20.73	1.334E-03	.0825	1.656E-03	.1024	1.883E-03	.1164	2.170E-03
BOT 3363(169)	21.72	20.73	1.334E-03	.0825	1.656E-03	.1024	1.883E-03	.1164	2.170E-03
NOS 7763(169)	21.72	20.73	1.334E-03	.0825	1.656E-03	.1024	1.883E-03	.1164	2.170E-03
TOP 6209(169)	22.80	21.80	1.301E-03	.0804	1.615E-03	.0998	1.836E-03	.1135	2.113E-03
OS 1009(169)	22.83	21.83	1.300E-03	.0804	1.614E-03	.0998	1.834E-03	.1134	2.113E-03
BOT 3364(169)	22.83	21.83	1.300E-03	.0804	1.614E-03	.0998	1.834E-03	.1134	2.113E-03
NOS 7764(169)	22.83	21.83	1.300E-03	.0804	1.614E-03	.0998	1.834E-03	.1134	2.113E-03
TOP 6210(169)	23.90	22.90	1.269E-03	.0785	1.575E-03	.0974	1.791E-03	.1107	2.063E-03
OS 1010(169)	23.90	22.90	1.269E-03	.0785	1.575E-03	.0974	1.791E-03	.1107	2.063E-03
BOT 3365(169)	23.90	22.90	1.269E-03	.0785	1.575E-03	.0974	1.791E-03	.1107	2.063E-03
NOS 7765(169)	23.90	22.90	1.269E-03	.0785	1.575E-03	.0974	1.791E-03	.1107	2.063E-03
TOP 6211(169)	24.98	23.98	1.241E-03	.0767	1.540E-03	.0952	1.750E-03	.1082	2.015E-03
OS 1011(169)	24.98	23.98	1.241E-03	.0767	1.540E-03	.0952	1.750E-03	.1082	2.015E-03
BOT 3366(169)	24.98	23.98	1.241E-03	.0767	1.540E-03	.0952	1.750E-03	.1082	2.015E-03
NOS 7766(169)	25.00	24.01	1.240E-03	.0767	1.539E-03	.0951	1.749E-03	.1082	2.015E-03
TOP 6212(169)	26.08	25.08	1.213E-03	.0750	1.505E-03	.0931	1.711E-03	.1058	1.970E-03
OS 1012(169)	26.08	25.08	1.213E-03	.0750	1.505E-03	.0931	1.711E-03	.1058	1.970E-03
BOT 3367(169)	26.08	25.08	1.213E-03	.0750	1.505E-03	.0931	1.711E-03	.1058	1.970E-03
NOS 7767(169)	26.08	25.08	1.213E-03	.0750	1.505E-03	.0931	1.711E-03	.1058	1.970E-03
TOP 6213(169)	27.16	26.16	1.188E-03	.0734	1.474E-03	.0911	1.676E-03	.1036	1.930E-03
OS 1013(169)	27.16	26.16	1.188E-03	.0734	1.474E-03	.0911	1.676E-03	.1036	1.930E-03
BOT 3368(169)	27.16	26.16	1.188E-03	.0734	1.474E-03	.0911	1.676E-03	.1036	1.930E-03
NOS 7768(169)	27.16	26.16	1.188E-03	.0734	1.474E-03	.0911	1.676E-03	.1036	1.930E-03
TOP 6214(169)	28.23	27.23	1.164E-03	.0719	1.445E-03	.0893	1.642E-03	.1015	1.890E-03
OS 1014(169)	28.23	27.23	1.164E-03	.0719	1.445E-03	.0893	1.642E-03	.1015	1.890E-03

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NASA-RI 0H50

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
24	1	7.95	212.3	1265	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.7	.023	1.002	3751	2.049E-05	7.464E-08	1.030E 06	1.618E-02	2.656E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7652	169	82	.0515	1.204E-01	1.1796E-01
UP SIDE(US)	8494	169	82	.0515	1.204E-01	1.1796E-01
BOTTOM(BOT)	8037	169	82	.0515	1.204E-01	1.1796E-01
TOP(TOP)	8377	169	82	.0515	1.204E-01	1.1796E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
HOT 3369(169)	28.26	27.26	1.164E-03	.0719	1.444E-03	.0893	1.642E-03	.1015	1.891E-03
NOS 7769(169)	28.26	27.26	1.164E-03	.0719	1.444E-03	.0893	1.642E-03	.1015	1.891E-03
TOP 6215(169)	29.33	28.34	1.141E-03	.0705	1.416E-03	.0875	1.610E-03	.0995	1.853E-03
US 1015(169)	29.33	28.34	1.141E-03	.0705	1.416E-03	.0875	1.610E-03	.0995	1.853E-03
HOT 3370(169)	29.33	28.34	1.141E-03	.0705	1.416E-03	.0875	1.610E-03	.0995	1.853E-03
NOS 7770(169)	29.33	28.34	1.141E-03	.0705	1.416E-03	.0875	1.610E-03	.0995	1.853E-03
TOP 6216(169)	30.41	29.41	1.120E-03	.0692	1.390E-03	.0859	1.580E-03	.0977	1.819E-03
US 1016(169)	30.41	29.41	1.120E-03	.0692	1.390E-03	.0859	1.580E-03	.0977	1.819E-03
HOT 3371(169)	30.41	29.41	1.120E-03	.0692	1.390E-03	.0859	1.580E-03	.0977	1.819E-03
NOS 7771(169)	30.41	29.41	1.120E-03	.0692	1.390E-03	.0859	1.580E-03	.0977	1.819E-03
TOP 6217(169)	31.51	30.51	1.100E-03	.0680	1.365E-03	.0843	1.552E-03	.0959	1.785E-03
US 1017(169)	31.51	30.51	1.100E-03	.0680	1.365E-03	.0843	1.552E-03	.0959	1.785E-03
HOT 3372(169)	31.51	30.51	1.100E-03	.0680	1.365E-03	.0843	1.552E-03	.0959	1.785E-03
NOS 7772(169)	31.51	30.51	1.100E-03	.0680	1.365E-03	.0843	1.552E-03	.0959	1.785E-03
TOP 6218(169)	32.59	31.59	1.081E-03	.0668	1.341E-03	.0829	1.525E-03	.0942	1.755E-03
US 1018(169)	32.59	31.59	1.081E-03	.0668	1.341E-03	.0829	1.525E-03	.0942	1.755E-03
HOT 3373(169)	32.59	31.59	1.081E-03	.0668	1.341E-03	.0829	1.525E-03	.0942	1.755E-03
NOS 7773(169)	32.59	31.59	1.081E-03	.0668	1.341E-03	.0829	1.525E-03	.0942	1.755E-03
HOT 3374(169)	33.66	32.67	1.063E-03	.0657	1.319E-03	.0815	1.500E-03	.0927	1.726E-03
TOP 6219(169)	33.69	32.69	1.062E-03	.0657	1.319E-03	.0815	1.499E-03	.0926	1.725E-03
US 1019(169)	33.69	32.69	1.062E-03	.0657	1.319E-03	.0815	1.499E-03	.0926	1.725E-03
NOS 7774(169)	33.69	32.69	1.062E-03	.0657	1.319E-03	.0815	1.499E-03	.0926	1.725E-03
TOP 6220(169)	34.76	33.77	1.045E-03	.0646	1.297E-03	.0802	1.475E-03	.0912	1.697E-03
US 1020(169)	34.76	33.77	1.045E-03	.0646	1.297E-03	.0802	1.475E-03	.0912	1.697E-03
HOT 3375(169)	34.76	33.77	1.045E-03	.0646	1.297E-03	.0802	1.475E-03	.0912	1.697E-03
NOS 7775(169)	34.76	33.77	1.045E-03	.0646	1.297E-03	.0802	1.475E-03	.0912	1.697E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
24	1	7.95	212.3	1265	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.7	.023	1.002	3751	2.049E-05	7.464E-08	1.030E 06	1.618E-02	2.656E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	169	82	.0515	1.204E-01	1.1796E-01
OP SIDE(OS)	8494	169	82	.0515	1.204E-01	1.1796E-01
BOTTOM(BOT)	8037	169	82	.0515	1.204E-01	1.1796E-01
TOP(TOP)	8377	169	82	.0515	1.204E-01	1.1796E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6221(169)	35.84	34.84	1.029E-03	.0636	1.277E-03	.0790	1.452E-03	.0898	1.672E-03
OS 1021(169)	35.84	34.84	1.029E-03	.0636	1.277E-03	.0790	1.452E-03	.0898	1.672E-03
BOT 3376(169)	35.84	34.84	1.029E-03	.0636	1.277E-03	.0790	1.452E-03	.0898	1.672E-03
NOS 7776(169)	35.84	34.84	1.029E-03	.0636	1.277E-03	.0790	1.452E-03	.0898	1.672E-03
TOP 6222(169)	36.94	35.94	1.013E-03	.0626	1.258E-03	.0777	1.430E-03	.0884	1.646E-03
OS 1022(169)	36.94	35.94	1.013E-03	.0626	1.258E-03	.0777	1.430E-03	.0884	1.646E-03
BOT 3377(169)	36.94	35.94	1.013E-03	.0626	1.258E-03	.0777	1.430E-03	.0884	1.646E-03
NOS 7777(169)	36.94	35.94	1.013E-03	.0626	1.258E-03	.0777	1.430E-03	.0884	1.646E-03
TOP 6223(169)	38.02	37.02	9.984E-04	.0617	1.239E-03	.0766	1.409E-03	.0871	1.621E-03
OS 1023(169)	38.02	37.02	9.984E-04	.0617	1.239E-03	.0766	1.409E-03	.0871	1.621E-03
BOT 3378(169)	38.02	37.02	9.984E-04	.0617	1.239E-03	.0766	1.409E-03	.0871	1.621E-03
NOS 7778(169)	38.02	37.02	9.984E-04	.0617	1.239E-03	.0766	1.409E-03	.0871	1.621E-03
TOP 6224(169)	39.09	38.10	9.842E-04	.0608	1.222E-03	.0755	1.389E-03	.0858	1.598E-03
OS 1024(169)	39.09	38.10	9.842E-04	.0608	1.222E-03	.0755	1.389E-03	.0858	1.598E-03
BOT 3379(169)	39.09	38.10	9.842E-04	.0608	1.222E-03	.0755	1.389E-03	.0858	1.598E-03
NOS 7779(169)	39.09	38.10	9.842E-04	.0608	1.222E-03	.0755	1.389E-03	.0858	1.598E-03
BOT 3380(169)	40.17	39.17	9.706E-04	.0600	1.205E-03	.0744	1.369E-03	.0846	1.575E-03
TOP 6225(169)	40.20	39.20	9.703E-04	.0600	1.204E-03	.0744	1.369E-03	.0846	1.575E-03
OS 1025(169)	40.20	39.20	9.703E-04	.0600	1.204E-03	.0744	1.369E-03	.0846	1.575E-03
NOS 7780(169)	40.20	39.20	9.703E-04	.0600	1.204E-03	.0744	1.369E-03	.0846	1.575E-03
TOP 6226(169)	41.27	40.27	9.572E-04	.0618	1.188E-03	.0767	1.351E-03	.0872	1.367E-03
OS 1026(169)	41.27	40.27	9.572E-04	.0618	1.188E-03	.0767	1.351E-03	.0872	1.367E-03
BOT 3381(169)	41.27	40.27	9.572E-04	.0618	1.188E-03	.0767	1.351E-03	.0872	1.367E-03
NOS 7781(169)	41.27	40.27	9.572E-04	.0618	1.188E-03	.0767	1.351E-03	.0872	1.367E-03
TOP 6227(169)	42.35	41.35	9.447E-04	.0585	1.172E-03	.0726	1.333E-03	.0825	1.526E-03
OS 1027(169)	42.35	41.35	9.447E-04	.0585	1.172E-03	.0726	1.333E-03	.0825	1.526E-03
BOT 3382(169)	42.35	41.35	9.447E-04	.0585	1.172E-03	.0726	1.333E-03	.0825	1.526E-03
NOS 7782(169)	42.35	41.35	9.447E-04	.0585	1.172E-03	.0726	1.333E-03	.0825	1.526E-03

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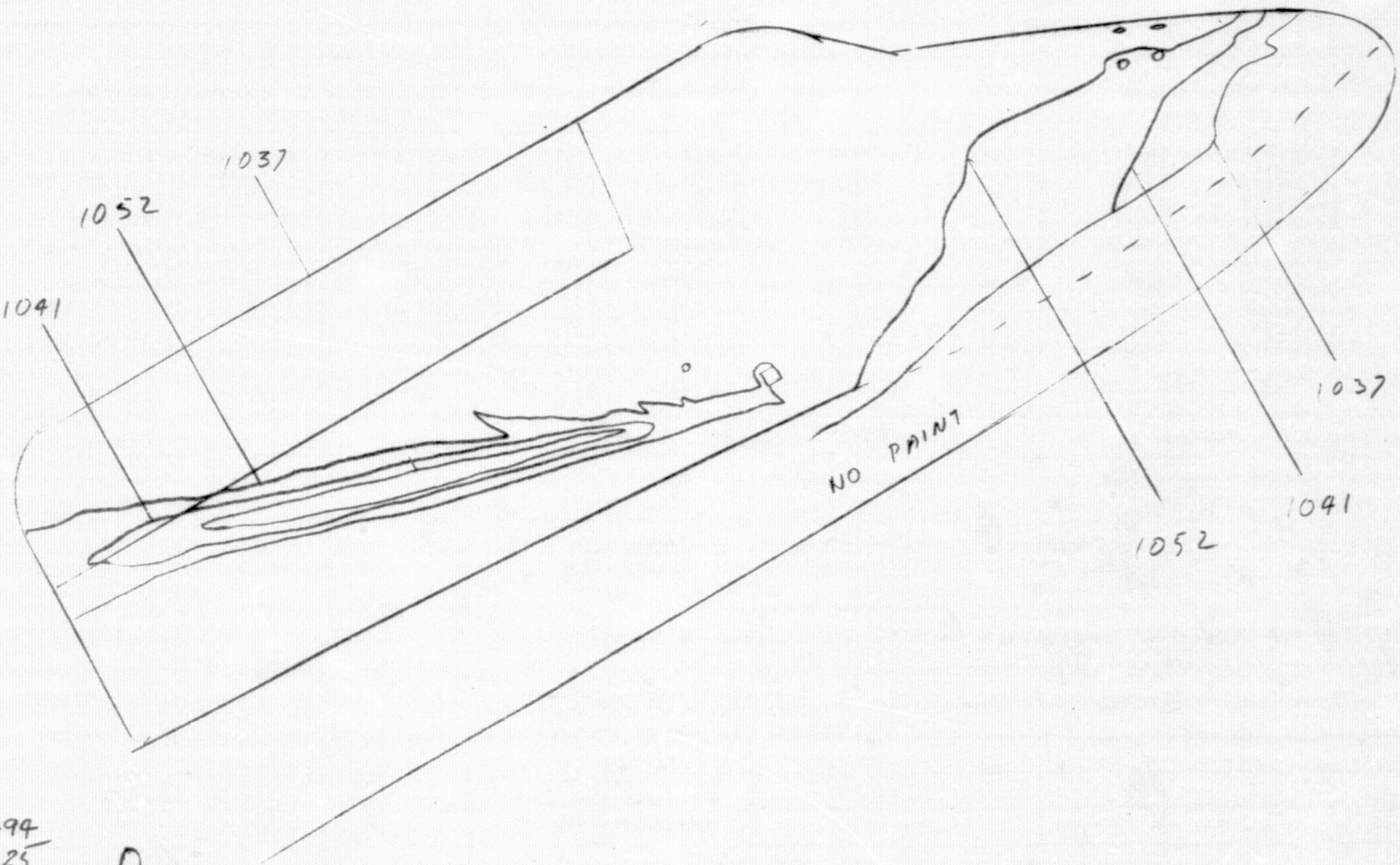
NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
24	1	7.95	212.4	1253	30.01	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
91.9	.023	1.002	3734	2.069E-05	7.396E-08	1.044E 06	1.616E-02	2.641E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	169	82	.0515	1.204E-01	1.1796E-01
OP SIDE(OS)	8496	169	82	.0515	1.204E-01	1.1796E-01
BOTTOM(BOT)	8037	169	82	.0515	1.204E-01	1.1796E-01
TOP(TOP)	8377	169	82	.0515	1.204E-01	1.1796E-01

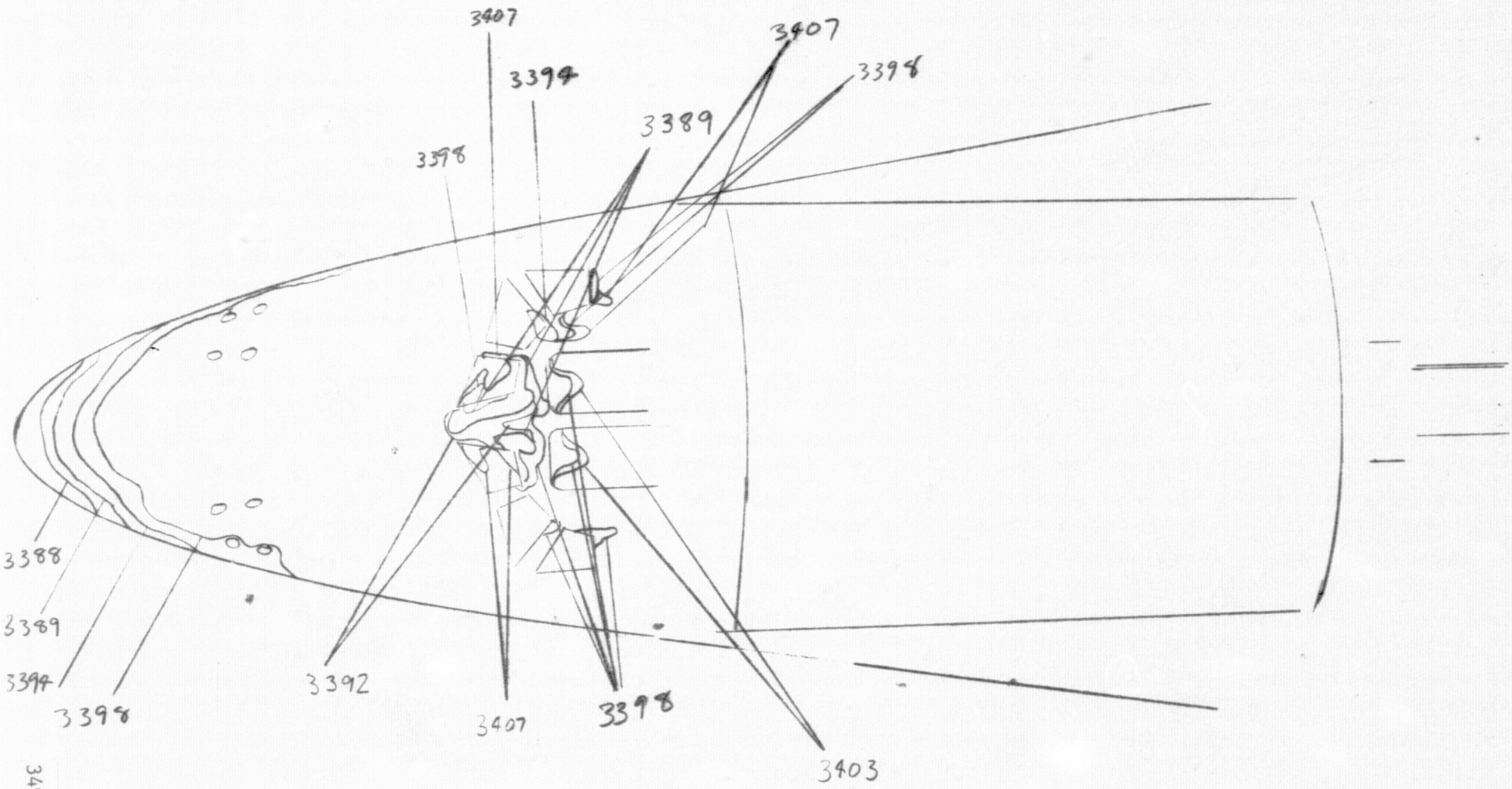
PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
	43.10		MODEL WAS LEFT CENTERLINE						
BOT 3383(169)	43.42	42.43	9.327E-04	.0580	1.158E-03	.0720	1.316E-03	.0819	1.484E-03
TOP 6228(169)	43.45	42.45	9.324E-04	.0581	1.157E-03	.0721	1.315E-03	.0820	1.475E-03
OS 1028(169)	43.45	42.45	9.324E-04	.0581	1.157E-03	.0721	1.315E-03	.0820	1.475E-03
NOS 7783(169)	43.45	42.45	9.324E-04	.0581	1.157E-03	.0721	1.315E-03	.0820	1.475E-03
TOP 6229(169)	44.53	43.53	9.209E-04	.0569	1.143E-03	.0706	1.299E-03	.0802	1.498E-03
OS 1029(169)	44.53	43.53	9.209E-04	.0569	1.143E-03	.0706	1.299E-03	.0802	1.498E-03
BOT 3384(169)	44.53	43.53	9.209E-04	.0569	1.143E-03	.0706	1.299E-03	.0802	1.498E-03
NOS 7784(169)	44.53	43.53	9.209E-04	.0569	1.143E-03	.0706	1.299E-03	.0802	1.498E-03
TOP 6230(169)	45.60	44.60	9.096E-04	.0562	1.129E-03	.0697	1.283E-03	.0793	1.476E-03
OS 1030(169)	45.60	44.60	9.096E-04	.0562	1.129E-03	.0697	1.283E-03	.0793	1.476E-03
BOT 3385(169)	45.60	44.60	9.096E-04	.0562	1.129E-03	.0697	1.283E-03	.0793	1.476E-03
NOS 7785(169)	45.63	44.63	9.093E-04	.0562	1.129E-03	.0697	1.283E-03	.0793	1.476E-03



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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
25	1	7.97	427.7	1275	30.02	-.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.0	.045	1.996	3767	4.049E-05	7.489E-08	2.037E 06	2.287E-02	1.891E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	YGA(TO)	BETA(TO)
NOP SIDE(NOS)	7652	125	78	.0493	0	0
UP SIDE(OS)	8494	125	78	.0493	0	0
BOTTOM(BOT)	8037	125	78	.0493	0	0
TOP(TOP)	8377	200	78	.0529	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
NO 3386(125)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 6231(200)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 1031(125)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 7786(125)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 6232(200)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 1032(125)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 3387(125)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7787(125)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 6233(200)	2.18	1.17	8.291E-03	.3624	1.037E-02	.4531	1.185E-02	.5181	6.768E-03
OS 1033(125)	2.18	1.17	2.718E-03	.1188	3.325E-03	.1453	3.743E-03	.1636	2.228E-03
BOT 3388(125)	2.18	1.17	2.718E-03	.1188	3.325E-03	.1453	3.743E-03	.1636	2.228E-03
NOS 7788(125)	2.18	1.17	2.718E-03	.1188	3.325E-03	.1453	3.743E-03	.1636	2.228E-03
TOP 6234(200)	3.28	2.27	5.946E-03	.2599	7.433E-03	.3249	8.499E-03	.3715	4.853E-03
OS 1034(125)	3.28	2.27	1.949E-03	.0852	2.384E-03	.1042	2.684E-03	.1173	1.598E-03
BOT 3389(125)	3.28	2.27	1.949E-03	.0852	2.384E-03	.1042	2.684E-03	.1173	1.598E-03
NOS 7789(125)	3.28	2.27	1.949E-03	.0852	2.384E-03	.1042	2.684E-03	.1173	1.598E-03
TOP 6235(200)	4.36	3.34	4.896E-03	.2140	6.121E-03	.2676	6.998E-03	.3060	3.998E-03
OS 1035(125)	4.36	3.34	1.605E-03	.0702	1.963E-03	.0858	2.210E-03	.0966	1.316E-03
BOT 3390(125)	4.36	3.34	1.605E-03	.0702	1.963E-03	.0858	2.210E-03	.0966	1.316E-03
NOS 7790(125)	4.36	3.34	1.605E-03	.0702	1.963E-03	.0858	2.210E-03	.0966	1.316E-03
TOP 6236(200)	5.43	4.42	4.258E-03	.1861	5.324E-03	.2327	6.087E-03	.2660	3.475E-03
OS 1036(125)	5.43	4.42	1.396E-03	.0610	1.708E-03	.0746	1.922E-03	.0840	1.144E-03
BOT 3391(125)	5.43	4.42	1.396E-03	.0610	1.708E-03	.0746	1.922E-03	.0840	1.144E-03
NOS 7791(125)	5.46	4.44	1.392E-03	.0608	1.703E-03	.0744	1.917E-03	.0838	1.141E-03
TOP 6237(200)	6.53	5.52	3.810E-03	.1665	4.763E-03	.2082	5.446E-03	.2380	3.109E-03
OS 1037(125)	6.53	5.52	1.249E-03	.0546	1.528E-03	.0668	1.720E-03	.0752	1.024E-03
BOT 3392(125)	6.53	5.52	1.249E-03	.0546	1.528E-03	.0668	1.720E-03	.0752	1.024E-03
NOS 7792(125)	6.53	5.52	1.249E-03	.0546	1.528E-03	.0668	1.720E-03	.0752	1.024E-03

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NASA-RI OH50

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
25	1	7.97	428.0	1275	30.02	-.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.1	.045	1.998	3767	4.050E-05	7.493E-08	2.037E 06	2.288E-02	1.891E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	125	78	.0493	6.378E-02	5.9538E-02
UP SIDE(OS)	8494	125	78	.0493	6.378E-02	5.9538E-02
BOTTOM(BOT)	8037	125	78	.0493	6.378E-02	5.9538E-02
TOP(TOP)	8377	200	78	.0529	1.656E-01	1.6923E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6238(200)	7.61	6.60	3.485E-03	.1523	4.358E-03	.1904	4.982E-03	.2177	2.844E-03
OS 1038(125)	7.61	6.60	1.143E-03	.0499	1.398E-03	.0611	1.573E-03	.0688	9.363E-04
BOT 3393(125)	7.61	6.60	1.143E-03	.0499	1.398E-03	.0611	1.573E-03	.0688	9.363E-04
NOS 7793(125)	7.61	6.60	1.143E-03	.0499	1.398E-03	.0611	1.573E-03	.0688	9.363E-04
TOP 6239(200)	8.71	7.70	3.227E-03	.1410	4.034E-03	.1763	4.612E-03	.2016	2.634E-03
OS 1039(125)	8.71	7.70	1.056E-03	.0462	1.294E-03	.0566	1.456E-03	.0637	8.672E-04
BOT 3394(125)	8.71	7.70	1.056E-03	.0462	1.294E-03	.0566	1.456E-03	.0637	8.672E-04
NOS 7794(125)	8.71	7.70	1.056E-03	.0462	1.294E-03	.0566	1.456E-03	.0637	8.672E-04
TOP 6240(200)	9.79	8.77	3.022E-03	.1321	3.778E-03	.1651	4.320E-03	.1889	2.466E-03
OS 1040(125)	9.79	8.77	9.909E-04	.0433	1.212E-03	.0530	1.364E-03	.0596	8.119E-04
BOT 3395(125)	9.79	8.77	9.909E-04	.0433	1.212E-03	.0530	1.364E-03	.0596	8.119E-04
NOS 7795(125)	9.79	8.77	9.909E-04	.0433	1.212E-03	.0530	1.364E-03	.0596	8.119E-04
BOT 3396(125)	10.86	9.85	9.352E-04	.0409	1.144E-03	.0500	1.288E-03	.0563	7.661E-04
TOP 6241(200)	10.89	9.88	2.849E-03	.1245	3.561E-03	.1557	4.072E-03	.1780	2.325E-03
OS 1041(125)	10.89	9.88	9.340E-04	.0408	1.142E-03	.0499	1.286E-03	.0562	7.655E-04
NOS 7796(125)	10.89	9.88	9.340E-04	.0408	1.142E-03	.0499	1.286E-03	.0562	7.655E-04
TOP 6242(200)	11.96	10.95	2.705E-03	.1182	3.382E-03	.1478	3.867E-03	.1690	2.208E-03
OS 1042(125)	11.96	10.95	8.869E-04	.0388	1.085E-03	.0474	1.221E-03	.0534	7.268E-04
BOT 3397(125)	11.96	10.95	8.869E-04	.0388	1.085E-03	.0474	1.221E-03	.0534	7.268E-04
NOS 7797(125)	11.96	10.95	8.869E-04	.0388	1.085E-03	.0474	1.221E-03	.0534	7.268E-04
TOP 6243(200)	13.04	12.03	2.581E-03	.1128	3.227E-03	.1411	3.690E-03	.1613	2.109E-03
OS 1043(125)	13.04	12.03	8.463E-04	.0370	1.035E-03	.0453	1.165E-03	.0509	6.942E-04
BOT 3398(125)	13.04	12.03	8.463E-04	.0370	1.035E-03	.0453	1.165E-03	.0509	6.942E-04
NOS 7798(125)	13.04	12.03	8.463E-04	.0370	1.035E-03	.0453	1.165E-03	.0509	6.942E-04
TOP 6244(200)	14.14	13.13	2.471E-03	.1080	3.089E-03	.1350	3.532E-03	.1543	2.016E-03
OS 1044(125)	14.14	13.13	8.101E-04	.0354	9.907E-04	.0433	1.115E-03	.0487	6.638E-04
BOT 3399(125)	14.14	13.13	8.101E-04	.0354	9.907E-04	.0433	1.115E-03	.0487	6.638E-04
NOS 7799(125)	14.14	13.13	8.101E-04	.0354	9.907E-04	.0433	1.115E-03	.0487	6.638E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

• UNCLASSIFIED •

3/29/74

NASA-RT 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
25	1	7.97	428.0	1275	30.02	-.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.1	.045	1.998	3766	4.049E-05	7.495E-08	2.036E 06	2.288E-02	1.891E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	125	78	.0493	6.378E-02	5.9538E-02
UP SIDE(US)	8494	125	78	.0493	6.378E-02	5.9538E-02
BOTTOM(BOT)	8037	125	78	.0493	6.378E-02	5.9538E-02
TOP(TOP)	8377	200	78	.0529	1.656E-01	1.6923E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6245(200)	15.22	14.21	2.375E-03	.1038	2.969E-03	.1297	3.395E-03	.1483	1.938E-03
US 1045(125)	15.22	14.21	7.788E-04	.0340	9.524E-04	.0416	1.072E-03	.0468	6.381E-04
HOT 3400(125)	15.22	14.21	7.788E-04	.0340	9.524E-04	.0416	1.072E-03	.0468	6.381E-04
NOS 7800(125)	15.22	14.21	7.788E-04	.0340	9.524E-04	.0416	1.072E-03	.0468	6.381E-04
TOP 6246(200)	16.32	15.31	2.288E-03	.1000	2.861E-03	.1250	3.271E-03	.1430	1.869E-03
US 1046(125)	16.32	15.31	7.502E-04	.0328	9.175E-04	.0401	1.033E-03	.0451	6.151E-04
HOT 3401(125)	16.32	15.31	7.502E-04	.0328	9.175E-04	.0401	1.033E-03	.0451	6.151E-04
NOS 7801(125)	16.32	15.31	7.502E-04	.0328	9.175E-04	.0401	1.033E-03	.0451	6.151E-04
TOP 6247(200)	17.40	16.38	2.212E-03	.0967	2.765E-03	.1209	3.161E-03	.1382	1.807E-03
US 1047(125)	17.40	16.38	7.252E-04	.0317	8.869E-04	.0388	9.956E-04	.0436	5.948E-04
HOT 3402(125)	17.40	16.38	7.252E-04	.0317	8.869E-04	.0388	9.984E-04	.0436	5.948E-04
NOS 7802(125)	17.40	16.38	7.252E-04	.0317	8.869E-04	.0388	9.984E-04	.0436	5.948E-04
HOT 3403(125)	18.47	17.46	7.025E-04	.0307	8.591E-04	.0375	9.671E-04	.0422	5.755E-04
TOP 6248(200)	18.50	17.48	2.141E-03	.0935	2.677E-03	.1169	3.060E-03	.1337	1.746E-03
US 1048(125)	18.50	17.48	7.020E-04	.0307	8.585E-04	.0375	9.664E-04	.0422	5.749E-04
NOS 7803(125)	18.50	17.48	7.020E-04	.0307	8.585E-04	.0375	9.664E-04	.0422	5.749E-04
TOP 6249(200)	19.57	18.56	2.078E-03	.0908	2.598E-03	.1135	2.970E-03	.1298	1.696E-03
US 1049(125)	19.57	18.56	6.813E-04	.0298	8.332E-04	.0364	9.380E-04	.0410	5.584E-04
HOT 3404(125)	19.57	18.56	6.813E-04	.0298	8.332E-04	.0364	9.380E-04	.0410	5.584E-04
NOS 7804(125)	19.57	18.56	6.813E-04	.0298	8.332E-04	.0364	9.380E-04	.0410	5.584E-04
TOP 6250(200)	20.65	19.64	2.020E-03	.0882	2.526E-03	.1103	2.888E-03	.1261	1.648E-03
HOT 3405(125)	20.65	19.64	6.624E-04	.0289	8.101E-04	.0354	9.119E-04	.0398	5.425E-04
US 1050(125)	20.67	19.66	6.620E-04	.0289	8.095E-04	.0354	9.113E-04	.0398	5.424E-04
NOS 7805(125)	20.67	19.66	6.620E-04	.0289	8.095E-04	.0354	9.113E-04	.0398	5.424E-04
TOP 6251(200)	21.75	20.74	1.966E-03	.0859	2.458E-03	.1073	2.810E-03	.1227	1.604E-03
US 1051(125)	21.75	20.74	6.445E-04	.0282	7.883E-04	.0344	8.874E-04	.0388	5.279E-04
HOT 3406(125)	21.75	20.74	6.445E-04	.0282	7.883E-04	.0344	8.874E-04	.0388	5.279E-04
NOS 7806(125)	21.75	20.74	6.445E-04	.0282	7.883E-04	.0344	8.874E-04	.0388	5.279E-04

3/29/74

NASA-RI 0H50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL R

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
25	1	7.97	428.3	1276	30.02	-.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	MREF (R= .04 FT)	STREF (R= .04 FT)
93.1	.045	1.999	3769	4.050E-05	7.499E-08	2.035E 06	2.289E-02	1.891E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	125	78	.0493	6.378E-02	5.9538E-02
OP SIDE(OS)	8494	125	78	.0493	6.378E-02	5.9538E-02
BOTTOM(BOT)	8037	125	78	.0493	6.378E-02	5.9538E-02
TOP(TOP)	8377	200	78	.0529	1.656E-01	1.6923E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6252(200)	22.83	21.81	1.917E-03	.0837	2.396E-03	.1047	2.740E-03	.1197	1.564E-03
OS 1052(125)	22.83	21.81	6.284E-04	.0275	7.686E-04	.0336	8.652E-04	.0378	5.149E-04
BOT 3407(125)	22.83	21.81	6.284E-04	.0275	7.686E-04	.0336	8.652E-04	.0378	5.149E-04
NOS 7807(125)	22.83	21.81	6.284E-04	.0275	7.686E-04	.0336	8.652E-04	.0378	5.149E-04
TOP 6253(200)	23.93	22.92	1.870E-03	.0817	2.338E-03	.1021	2.673E-03	.1168	1.526E-03
OS 1053(125)	23.93	22.92	6.132E-04	.0268	7.499E-04	.0328	8.442E-04	.0369	5.023E-04
BOT 3408(125)	23.93	22.92	6.132E-04	.0268	7.499E-04	.0328	8.442E-04	.0369	5.023E-04
NOS 7808(125)	23.93	22.92	6.132E-04	.0268	7.499E-04	.0328	8.442E-04	.0369	5.023E-04
TOP 6254(200)	25.00	23.99	1.852E-03	.0798	2.285E-03	.0998	2.613E-03	.1141	1.491E-03
OS 1054(125)	25.00	23.99	5.992E-04	.0262	7.329E-04	.0320	8.250E-04	.0360	4.910E-04
BOT 3409(125)	25.00	23.99	5.992E-04	.0262	7.329E-04	.0320	8.250E-04	.0360	4.910E-04
NOS 7809(125)	25.00	23.99	5.992E-04	.0262	7.329E-04	.0320	8.250E-04	.0360	4.910E-04
BOT 3410(125)	26.08	25.07	5.862E-04	.0256	7.170E-04	.0313	8.071E-04	.0353	4.804E-04
TOP 6255(200)	26.11	25.09	1.787E-03	.0781	2.234E-03	.0977	2.555E-03	.1117	1.459E-03
OS 1055(125)	26.11	25.09	5.860E-04	.0256	7.166E-04	.0313	8.067E-04	.0353	4.807E-04
NOS 7810(125)	26.11	25.09	5.860E-04	.0256	7.166E-04	.0313	8.067E-04	.0353	4.807E-04
TOP 6256(200)	27.18	26.17	1.750E-03	.0764	2.188E-03	.0955	2.501E-03	.1092	1.427E-03
OS 1056(125)	27.18	26.17	5.738E-04	.0251	7.017E-04	.0306	7.899E-04	.0345	4.697E-04
BOT 3411(125)	27.18	26.17	5.738E-04	.0251	7.017E-04	.0306	7.899E-04	.0345	4.697E-04
NOS 7811(125)	27.18	26.17	5.738E-04	.0251	7.017E-04	.0306	7.899E-04	.0345	4.697E-04
TOP 6257(200)	28.26	27.25	1.715E-03	.0749	2.144E-03	.0937	2.452E-03	.1071	1.400E-03
OS 1057(125)	28.26	27.25	5.623E-04	.0246	6.877E-04	.0300	7.742E-04	.0338	4.609E-04
BOT 3412(125)	28.26	27.25	5.623E-04	.0246	6.877E-04	.0300	7.742E-04	.0338	4.609E-04
NOS 7812(125)	28.28	27.27	5.621E-04	.0246	6.874E-04	.0300	7.738E-04	.0338	4.607E-04
TOP 6258(200)	29.36	28.35	1.681E-03	.0734	2.102E-03	.0918	2.403E-03	.1050	1.372E-03
OS 1058(125)	29.36	28.35	5.513E-04	.0241	6.742E-04	.0295	7.590E-04	.0332	4.518E-04
BOT 3413(125)	29.36	28.35	5.513E-04	.0241	6.742E-04	.0295	7.590E-04	.0332	4.518E-04
NOS 7813(125)	29.36	28.35	5.513E-04	.0241	6.742E-04	.0295	7.590E-04	.0332	4.518E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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* UNCLASSIFIED *
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3/29/74

NASA-RI 0H50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
25	1	7.97	428.2	1277	30.02	-.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.2	.045	1.995	3770	4.047E-05	7.502E-08	2.034E 06	2.289E-02	1.892E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	125	78	.0493	6.378E-02	5.9538E-02
OP SIDE(OS)	8494	125	78	.0493	6.378E-02	5.9538E-02
BOTTOM(BOT)	8037	125	78	.0493	6.378E-02	5.9538E-02
TOP(TOP)	8377	200	78	.0529	1.656E-01	1.6923E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6259(200)	30.44	29.42	1.650E-03	.0721	2.063E-03	.0901	2.359E-03	.1030	1.347E-03
OS 1059(125)	30.44	29.42	5.411E-04	.0236	6.618E-04	.0289	7.450E-04	.0325	4.435E-04
BOT 3414(125)	30.44	29.42	5.411E-04	.0236	6.618E-04	.0289	7.450E-04	.0325	4.435E-04
NOS 7814(125)	30.44	29.42	5.411E-04	.0236	6.618E-04	.0289	7.450E-04	.0325	4.435E-04
	30.51		MODEL HAS LEFT CENTERLINE						

3/29/74

NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
26	1	7.97	429.4	1310	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
95.6	.045	2.004	3819	3.955E-05	7.698E-08	1.962E 06	2.303E-02	1.919E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	125	82	.0493	0	0
OP SIDE(OS)	8494	125	82	.0493	0	0
HOTTOM(BOT)	8037	125	82	.0493	0	0
TOP(TOP)	8377	200	82	.0529	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 6260(200)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 1060(125)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 3415(125)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7815(125)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 6261(200)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 1061(125)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 3416(125)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7816(125)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 6262(200)	2.18	1.17	7.604E-03	.3302	9.449E-03	.4103	1.075E-02	.4669	6.257E-03
OS 1062(125)	2.18	1.17	2.371E-03	.1030	2.886E-03	.1253	3.236E-03	.1405	1.959E-03
HOT 3417(125)	2.18	1.17	2.371E-03	.1030	2.886E-03	.1253	3.236E-03	.1405	1.959E-03
NOS 7817(125)	2.18	1.17	2.371E-03	.1030	2.886E-03	.1253	3.236E-03	.1405	1.959E-03
TOP 6263(200)	3.25	2.24	5.483E-03	.2381	6.814E-03	.2959	7.754E-03	.3367	4.512E-03
OS 1063(125)	3.25	2.24	1.710E-03	.0742	2.081E-03	.0904	2.333E-03	.1013	1.412E-03
HOT 3418(125)	3.25	2.24	1.710E-03	.0742	2.081E-03	.0904	2.333E-03	.1013	1.412E-03
NOS 7818(125)	3.25	2.24	1.710E-03	.0742	2.081E-03	.0904	2.333E-03	.1013	1.412E-03
TOP 6264(200)	4.36	3.34	4.490E-03	.1950	5.580E-03	.2422	6.350E-03	.2757	3.693E-03
OS 1064(125)	4.36	3.34	1.400E-03	.0608	1.704E-03	.0740	1.911E-03	.0830	1.156E-03
HOT 3419(125)	4.36	3.34	1.400E-03	.0608	1.704E-03	.0740	1.911E-03	.0830	1.156E-03
NOS 7819(125)	4.36	3.34	1.400E-03	.0608	1.704E-03	.0740	1.911E-03	.0830	1.156E-03
TOP 6265(200)	5.43	4.42	3.906E-03	.1697	4.853E-03	.2108	5.523E-03	.2399	3.216E-03
OS 1065(125)	5.43	4.42	1.218E-03	.0529	1.482E-03	.0644	1.662E-03	.0722	1.007E-03
HOT 3420(125)	5.43	4.42	1.218E-03	.0529	1.482E-03	.0644	1.662E-03	.0722	1.007E-03
NOS 7820(125)	5.43	4.42	1.218E-03	.0529	1.482E-03	.0644	1.662E-03	.0722	1.007E-03
HOT 3421(125)	6.51	5.50	1.092E-03	.0474	1.329E-03	.0577	1.490E-03	.0647	9.019E-04

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NASA-RI 0H50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
26	1	7.97	429.6	1310	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
95.6	.045	2.005	3818	3.957E-05	7.697E-08	1.963E 06	2.303E-02	1.918E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	125	82	.0493	5.598E-02	5.192BE-02
OP SIDE(OS)	8494	125	82	.0493	5.598E-02	5.192BE-02
HOTTOM(BOT)	8037	125	82	.0493	5.598E-02	5.192BE-02
TOP(TOP)	8377	200	82	.0529	1.536E-01	1.5521E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6266(200)	6.53	5.52	3.496E-03	.1517	4.342E-03	.1885	4.941E-03	.2145	2.874E-03
OS 1066(125)	6.53	5.52	1.090E-03	.0473	1.326E-03	.0576	1.487E-03	.0646	8.999E-04
NOS 7821(125)	6.53	5.52	1.090E-03	.0473	1.326E-03	.0576	1.487E-03	.0646	8.999E-04
TOP 6267(200)	7.61	6.60	3.197E-03	.1388	3.972E-03	.1725	4.520E-03	.1963	2.629E-03
OS 1067(125)	7.61	6.60	9.967E-04	.0433	1.213E-03	.0527	1.360E-03	.0591	8.232E-04
HOT 3422(125)	7.61	6.60	9.967E-04	.0433	1.213E-03	.0527	1.360E-03	.0591	8.232E-04
NOS 7822(125)	7.61	6.60	9.967E-04	.0433	1.213E-03	.0527	1.360E-03	.0591	8.232E-04
TOP 6268(200)	8.68	7.67	2.968E-03	.1288	3.683E-03	.1600	4.191E-03	.1821	2.440E-03
OS 1068(125)	8.68	7.67	9.242E-04	.0401	1.125E-03	.0489	1.261E-03	.0548	7.640E-04
HOT 3423(125)	8.68	7.67	9.242E-04	.0401	1.125E-03	.0489	1.261E-03	.0548	7.640E-04
NOS 7823(125)	8.68	7.67	9.242E-04	.0401	1.125E-03	.0489	1.261E-03	.0548	7.640E-04
TOP 6269(200)	9.79	8.77	2.772E-03	.1204	3.444E-03	.1495	3.919E-03	.1702	2.280E-03
OS 1069(125)	9.79	8.77	8.642E-04	.0375	1.052E-03	.0457	1.179E-03	.0512	7.138E-04
HOT 3424(125)	9.79	8.77	8.642E-04	.0375	1.052E-03	.0457	1.179E-03	.0512	7.138E-04
NOS 7824(125)	9.79	8.77	8.642E-04	.0375	1.052E-03	.0457	1.179E-03	.0512	7.138E-04
TOP 6270(200)	10.86	9.85	2.616E-03	.1136	3.251E-03	.1412	3.699E-03	.1606	2.152E-03
OS 1070(125)	10.86	9.85	8.157E-04	.0354	9.927E-04	.0431	1.113E-03	.0483	6.738E-04
HOT 3425(125)	10.86	9.85	8.157E-04	.0354	9.927E-04	.0431	1.113E-03	.0483	6.738E-04
NOS 7825(125)	10.86	9.85	8.157E-04	.0354	9.927E-04	.0431	1.113E-03	.0483	6.738E-04
TOP 6271(200)	11.94	10.93	2.484E-03	.1078	3.086E-03	.1340	3.512E-03	.1525	2.043E-03
OS 1071(125)	11.94	10.93	7.745E-04	.0336	9.426E-04	.0409	1.057E-03	.0459	6.396E-04
HOT 3426(125)	11.94	10.93	7.745E-04	.0336	9.426E-04	.0409	1.057E-03	.0459	6.396E-04
NOS 7826(125)	11.96	10.95	7.736E-04	.0336	9.415E-04	.0409	1.056E-03	.0458	6.387E-04
TOP 6272(200)	13.04	12.03	2.367E-03	.1028	2.942E-03	.1277	3.348E-03	.1453	1.946E-03
OS 1072(125)	13.04	12.03	7.381E-04	.0320	8.984E-04	.0390	1.007E-03	.0437	6.093E-04
HOT 3427(125)	13.04	12.03	7.381E-04	.0320	8.984E-04	.0390	1.007E-03	.0437	6.093E-04
NOS 7827(125)	13.04	12.03	7.381E-04	.0320	8.984E-04	.0390	1.007E-03	.0437	6.093E-04

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NASA-RI OHSO

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
26	1	7.97	429.8	1310	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	PE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
95.6	.045	2.00E	381[illegible]	3.959E-05	7.696E-08	1.964E 06	2.304E-02	1.918E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	125	82	.0493	5.598E-02	5.192BE-02
OP SIDE(OS)	8494	125	82	.0493	5.598E-02	5.192BE-02
HOTTOM(BOT)	8037	125	82	.0493	5.598E-02	5.192BE-02
TOP(TOP)	8377	200	82	.0529	1.536E-01	1.5521E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6273(200)	14.12	13.10	2.268E-03	.0995	2.818E-03	.1223	3.207E-03	.1392	1.865E-03
OS 1073(125)	14.12	13.10	7.072E-04	.0307	8.607E-04	.0374	9.651E-04	.0419	5.838E-04
HOT 3428(125)	14.12	13.10	7.072E-04	.0307	8.607E-04	.0374	9.651E-04	.0419	5.838E-04
NOS 7828(125)	14.12	13.10	7.072E-04	.0307	8.607E-04	.0374	9.651E-04	.0419	5.838E-04
TOP 6274(200)	15.19	14.18	2.180E-03	.0947	2.709E-03	.1176	3.083E-03	.1339	1.793E-03
OS 1074(125)	15.19	14.18	6.798E-04	.0295	8.274E-04	.0359	9.278E-04	.0403	5.614E-04
HOT 3429(125)	15.22	14.21	6.792E-04	.0295	8.267E-04	.0359	9.270E-04	.0402	5.607E-04
NOS 7829(125)	15.22	14.21	6.792E-04	.0295	8.267E-04	.0359	9.270E-04	.0402	5.607E-04
TOP 6275(200)	16.29	15.28	2.100E-03	.0912	2.610E-03	.1133	2.970E-03	.1289	1.727E-03
OS 1075(125)	16.29	15.28	6.549E-04	.0284	7.970E-04	.0346	8.937E-04	.0388	5.405E-04
HOT 3430(125)	16.29	15.28	6.549E-04	.0284	7.970E-04	.0346	8.937E-04	.0388	5.405E-04
NOS 7830(125)	16.29	15.28	6.549E-04	.0284	7.970E-04	.0346	8.937E-04	.0388	5.405E-04
TOP 6276(200)	17.37	16.36	2.030E-03	.0881	2.523E-03	.1095	2.871E-03	.1246	1.669E-03
OS 1076(125)	17.37	16.36	6.330E-04	.0275	7.704E-04	.0334	8.638E-04	.0375	5.223E-04
HOT 3431(125)	17.37	16.36	6.330E-04	.0275	7.704E-04	.0334	8.638E-04	.0375	5.223E-04
NOS 7831(125)	17.37	16.36	6.330E-04	.0275	7.704E-04	.0334	8.638E-04	.0375	5.223E-04
TOP 6277(200)	18.47	17.46	1.965E-03	.0853	2.442E-03	.1060	2.779E-03	.1206	1.615E-03
OS 1077(125)	18.47	17.46	6.127E-04	.0266	7.457E-04	.0324	8.361E-04	.0363	5.056E-04
HOT 3432(125)	18.47	17.46	6.127E-04	.0266	7.457E-04	.0324	8.361E-04	.0363	5.056E-04
NOS 7832(125)	18.47	17.46	6.127E-04	.0266	7.457E-04	.0324	8.361E-04	.0363	5.056E-04
TOP 6278(200)	19.55	18.54	1.907E-03	.0828	2.370E-03	.1029	2.697E-03	.1171	1.567E-03
OS 1078(125)	19.55	18.54	5.946E-04	.0258	7.237E-04	.0314	8.115E-04	.0352	4.907E-04
HOT 3433(125)	19.55	18.54	5.946E-04	.0258	7.237E-04	.0314	8.115E-04	.0352	4.907E-04
NOS 7833(125)	19.55	18.54	5.946E-04	.0258	7.237E-04	.0314	8.115E-04	.0352	4.907E-04
	19.57		MODEL HAS LEFT CENTERLINE						

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NASA-RI OH50

VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
26	1	7.97	429.9	1310	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
95.6	.045	2.006	3818	3.960E-05	7.695E-08	1.965E 06	2.304E-02	1.917E-02

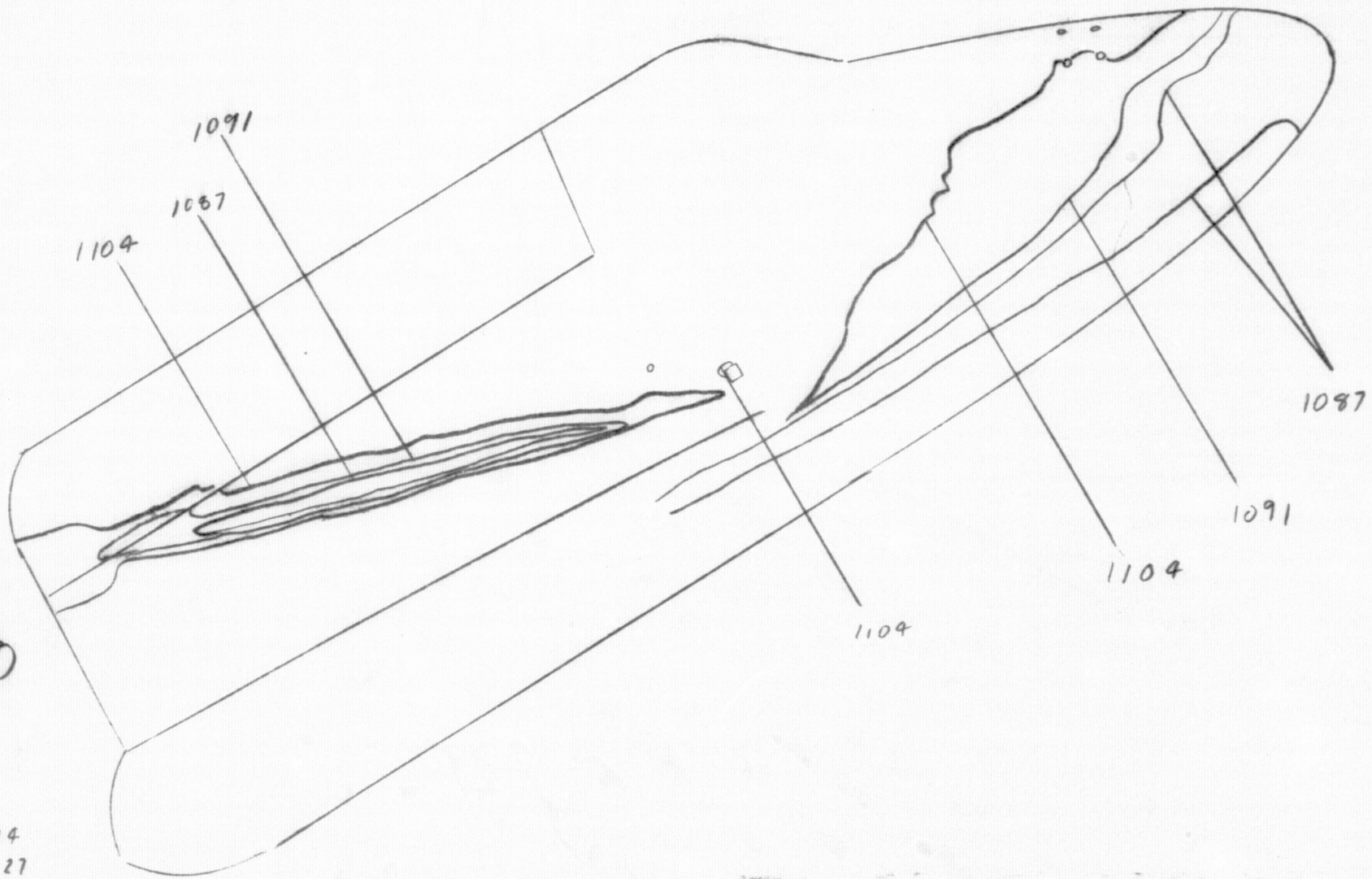
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	125	82	.0493	5.598E-02	5.1928E-02
UP SIDE(OS)	8494	125	82	.0493	5.598E-02	5.1928E-02
HOTTOM(BOT)	8037	125	82	.0493	5.598E-02	5.1928E-02
TOP(TOP)	8377	200	82	.0529	1.536E-01	1.5521E-01

	PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
OS	1079(125)	20.62	19.61	5.781E-04	.0251	7.036E-04	.0305	7.889E-04	.0342	4.768E-04
BOT	3434(125)	20.62	19.61	5.781E-04	.0251	7.036E-04	.0305	7.889E-04	.0342	4.768E-04
TOP	6279(200)	20.65	19.64	1.653E-03	.0804	2.302E-03	.0999	2.620E-03	.1137	1.522E-03
NOS	7834(125)	20.65	19.64	5.777E-04	.0251	7.031E-04	.0305	7.884E-04	.0342	4.765E-04

8377
GP27

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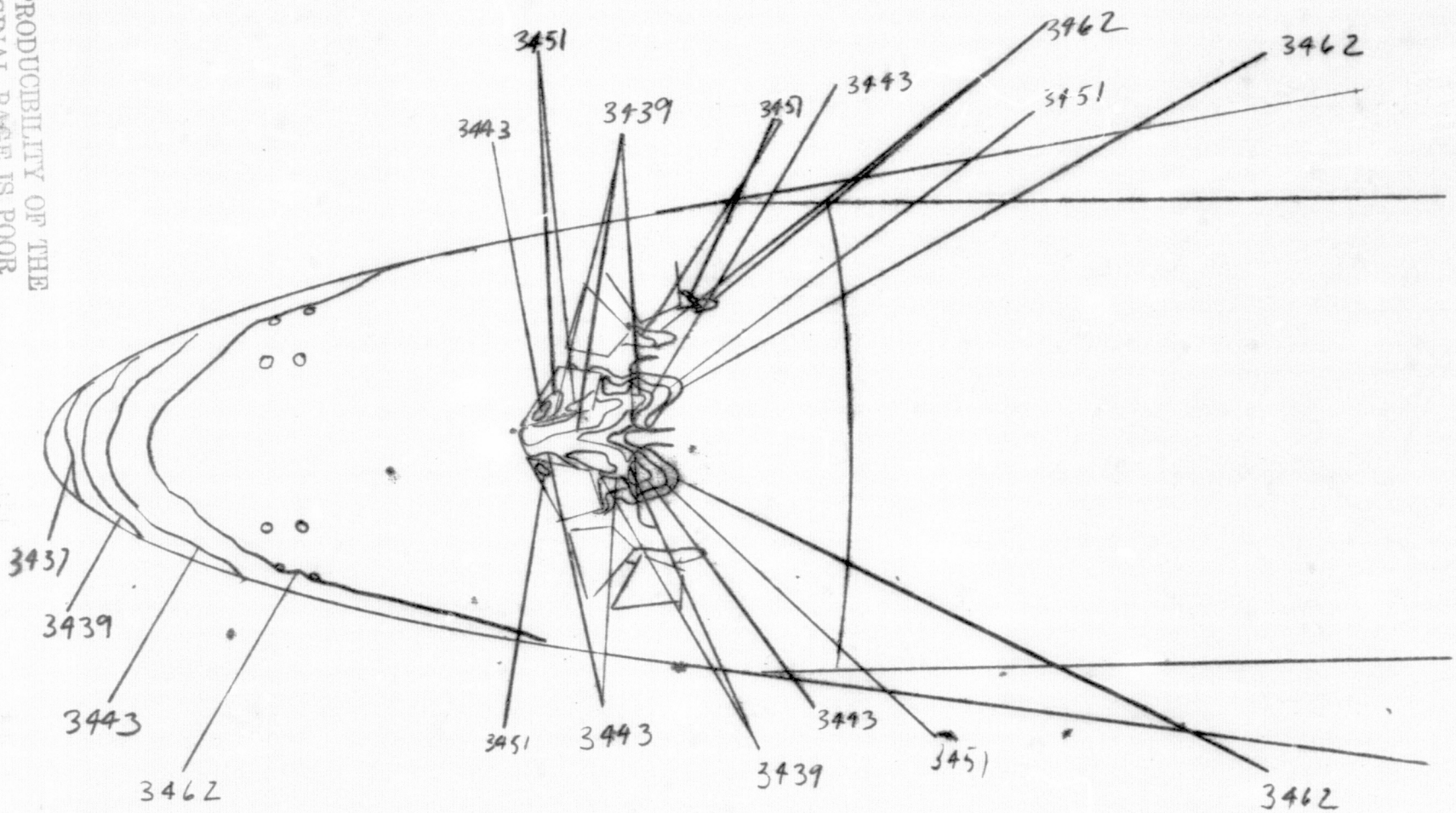
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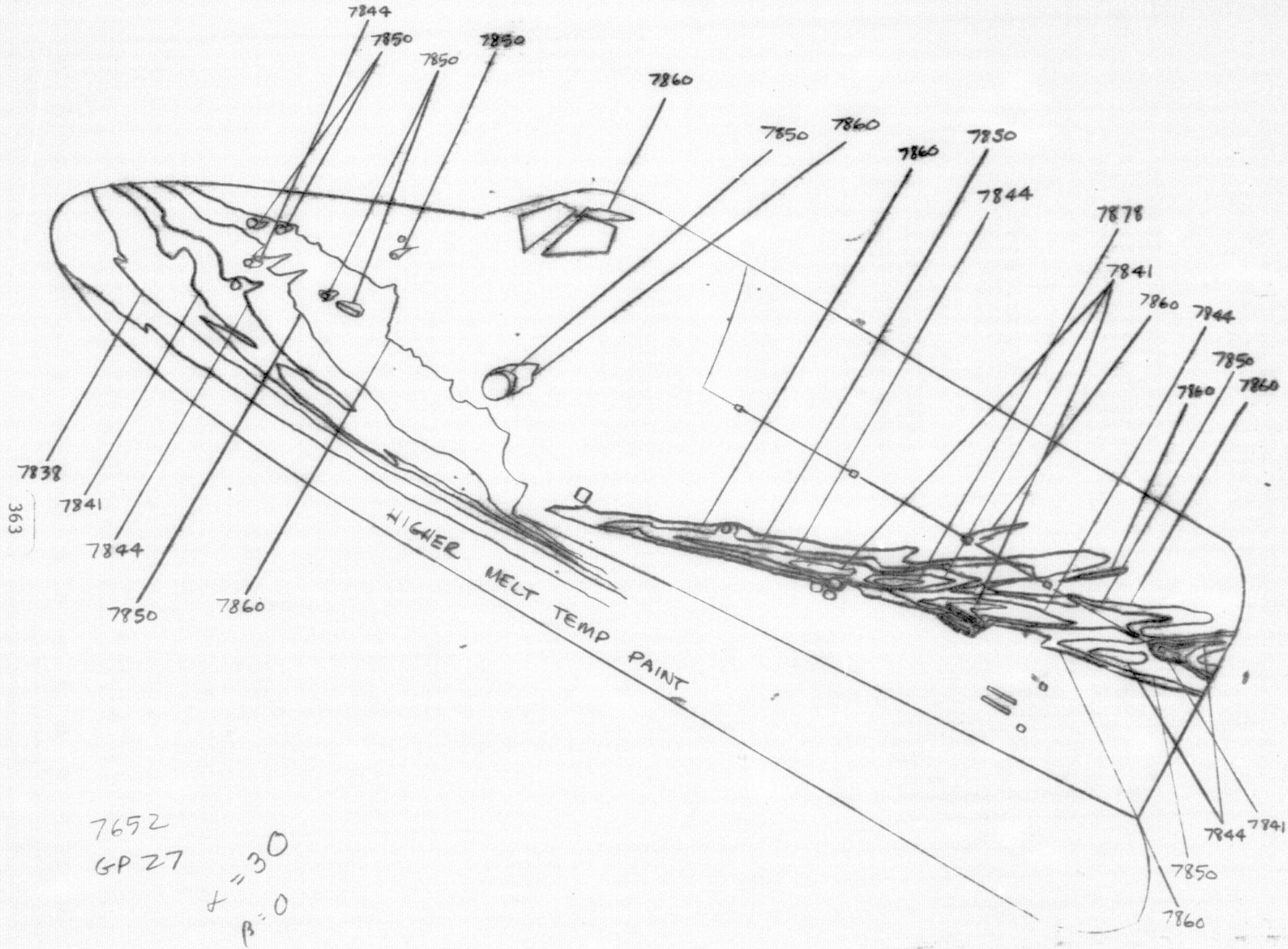
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CCP 27

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



8037
GRP 27



363

7652
GP 27
$\alpha = 30$
$\beta = 0$

3/29/74

NASA-RI 0H58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
27	1	7.97	430.4	1293	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.045	2.00E	3794	4.015E-05	7.599E-08	2.005E 06	2.300E-02	1.902E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7652	131	77	.0497	0	0
OP SIDE(OS)	8494	131	77	.0497	0	0
BOTTOM(BOT)	8037	131	77	.0497	0	0
TOP(TOP)	8377	300	77	.0568	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 6280(300)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 1080(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 3435(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 7835(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 6281(300)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 1081(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 3436(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 7836(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.83								
TOP 6282(300)	2.18	1.15	1.821E-02	.7917	2.361E-02	1.0262	2.774E-02	1.2057	1.479E-02
OS 1082(131)	2.18	1.15	3.104E-03	.1349	3.793E-03	.1649	4.265E-03	.1854	2.543E-03
HOT 3437(131)	2.18	1.15	3.104E-03	.1349	3.793E-03	.1649	4.265E-03	.1854	2.543E-03
NOS 7837(131)	2.18	1.15	3.104E-03	.1349	3.793E-03	.1449	4.265E-03	.1854	2.543E-03
TOP 6283(300)	3.25	2.23	1.810E-02	.5692	1.697E-02	.7378	1.994E-02	.8669	1.063E-02
OS 1083(131)	3.25	2.23	2.232E-03	.0970	2.727E-03	.1185	3.066E-03	.1333	1.828E-03
HOT 3438(131)	3.25	2.23	2.232E-03	.0970	2.727E-03	.1185	3.066E-03	.1333	1.828E-03
NOS 7838(131)	3.25	2.23	2.232E-03	.0970	2.727E-03	.1185	3.066E-03	.1333	1.828E-03
HOT 3439(131)	4.33	3.30	1.833E-03	.0797	2.240E-03	.0973	2.518E-03	.1094	1.501E-03
TOP 6284(300)	4.36	3.33	1.071E-02	.4656	1.389E-02	.6037	1.632E-02	.7091	8.694E-03
OS 1084(131)	4.36	3.33	1.826E-03	.0794	2.231E-03	.0970	2.509E-03	.1090	1.495E-03
NOS 7839(131)	4.36	3.33	1.826E-03	.0794	2.231E-03	.0970	2.509E-03	.1090	1.495E-03
TOP 6285(300)	5.43	4.41	9.313E-03	.4048	1.207E-02	.5247	1.418E-02	.6165	7.560E-03
OS 1085(131)	5.43	4.41	1.587E-03	.0690	1.940E-03	.0843	2.181E-03	.0948	1.300E-03
HOT 3440(131)	5.43	4.41	1.587E-03	.0690	1.940E-03	.0843	2.181E-03	.0948	1.300E-03
NOS 7840(131)	5.43	4.41	1.587E-03	.0690	1.940E-03	.0843	2.181E-03	.0948	1.300E-03
TOP 6286(300)	6.51	5.48	8.349E-03	.3628	1.082E-02	.4703	1.271E-02	.5525	6.774E-03
OS 1086(131)	6.51	5.48	1.423E-03	.0618	1.739E-03	.0756	1.955E-03	.0850	1.165E-03
HOT 3441(131)	6.51	5.48	1.423E-03	.0618	1.739E-03	.0756	1.955E-03	.0850	1.165E-03

3/29/74

NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
27	1	7.97	430.8	1294	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.045	2.010	3794	4.019E-05	7.599E-08	2.006E 06	2.301E-02	1.901E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHO*CXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	131	77	.0497	7.138E-02	6.7034E-02
OP SIDE(OS)	8494	131	77	.0497	7.138E-02	6.7034E-02
BOTTOM(BOT)	8037	131	77	.0497	7.138E-02	6.7034E-02
TOP(TOP)	8277	300	77	.0568	2.948E-01	3.4415E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
NOS 7841(131)	6.53	5.51	1.420E-03	.0617	1.735E-03	.0754	1.951E-03	.0848	1.163E-03
TOP 6287(300)	7.61	6.58	7.619E-03	.3310	9.875E-03	.4290	1.160E-02	.5040	6.177E-03
OS 1087(131)	7.61	6.58	1.299E-03	.0564	1.587E-03	.0689	1.784E-03	.0775	1.062E-03
BOT 3442(131)	7.61	6.58	1.299E-03	.0564	1.587E-03	.0689	1.784E-03	.0775	1.062E-03
NOS 7842(131)	7.61	6.58	1.299E-03	.0564	1.587E-03	.0689	1.784E-03	.0775	1.062E-03
TOP 6288(300)	8.68	7.66	7.063E-03	.3070	9.155E-03	.3979	1.076E-02	.4675	5.734E-03
OS 1088(131)	8.68	7.66	1.204E-03	.0523	1.471E-03	.0639	1.654E-03	.0719	9.862E-04
BOT 3443(131)	8.68	7.66	1.204E-03	.0523	1.471E-03	.0639	1.654E-03	.0719	9.862E-04
NOS 7843(131)	8.68	7.66	1.204E-03	.0523	1.471E-03	.0639	1.654E-03	.0719	9.862E-04
TOP 6289(300)	9.79	8.76	6.604E-03	.2871	8.560E-03	.3721	1.006E-02	.4372	5.361E-03
OS 1089(131)	9.79	8.76	1.126E-03	.0489	1.375E-03	.0598	1.546E-03	.0672	9.221E-04
BOT 3444(131)	9.79	8.76	1.126E-03	.0489	1.375E-03	.0598	1.546E-03	.0672	9.221E-04
NOS 7844(131)	9.79	8.76	1.126E-03	.0489	1.375E-03	.0598	1.546E-03	.0672	9.221E-04
TOP 6290(300)	10.86	9.84	6.233E-03	.2708	8.078E-03	.3510	9.492E-03	.4124	5.056E-03
OS 1090(131)	10.86	9.84	1.062E-03	.0462	1.298E-03	.0564	1.459E-03	.0634	8.696E-04
BOT 3445(131)	10.86	9.84	1.062E-03	.0462	1.298E-03	.0564	1.459E-03	.0634	8.696E-04
NOS 7845(131)	10.86	9.84	1.062E-03	.0462	1.298E-03	.0564	1.459E-03	.0634	8.696E-04
TOP 6291(300)	11.96	10.94	5.911E-03	.2568	7.661E-03	.3329	9.001E-03	.3911	4.795E-03
OS 1091(131)	11.96	10.94	1.007E-03	.0438	1.231E-03	.0535	1.384E-03	.0601	8.247E-04
BOT 3446(131)	11.96	10.94	1.007E-03	.0438	1.231E-03	.0535	1.384E-03	.0601	8.247E-04
NOS 7846(131)	11.96	10.94	1.007E-03	.0438	1.231E-03	.0535	1.384E-03	.0601	8.247E-04
TOP 6292(300)	13.04	12.01	5.640E-03	.2450	7.310E-03	.3176	8.589E-03	.3732	4.575E-03
OS 1092(131)	13.04	12.01	9.612E-04	.0418	1.174E-03	.0510	1.321E-03	.0574	7.869E-04
BOT 3447(131)	13.04	12.01	9.612E-04	.0418	1.174E-03	.0510	1.321E-03	.0574	7.869E-04
NOS 7847(131)	13.04	12.01	9.612E-04	.0418	1.174E-03	.0510	1.321E-03	.0574	7.869E-04

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
27	1	7.97	430.9	1294	30.01	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.045	2.011	3794	4.019E-05	7.600E-08	2.007E 06	2.301E-02	1.901E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	131	77	.0497	7.138E-02	6.7034E-02
OP SIDE(OS)	8494	131	77	.0497	7.138E-02	6.7034E-02
HOT TOM(HOT)	8037	131	77	.0497	7.138E-02	6.7034E-02
TOP(TOP)	8377	300	77	.0568	2.948E-01	3.4415E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6293(300)	14.14	13.12	5.398E-03	.2345	6.996E-03	.3039	8.220E-03	.3571	4.377E-03
OS 1093(131)	14.14	13.12	9.199E-04	.0400	1.124E-03	.0488	1.264E-03	.0549	7.528E-04
HOT 3448(131)	14.14	13.12	9.199E-04	.0400	1.124E-03	.0488	1.264E-03	.0549	7.528E-04
HOT 3449(131)	15.19	14.17	8.851E-04	.0385	1.082E-03	.0470	1.216E-03	.0528	7.245E-04
TOP 6294(300)	15.22	14.19	5.189E-03	.2255	6.726E-03	.2923	7.902E-03	.3435	4.213E-03
OS 1094(131)	15.22	14.19	8.844E-04	.0384	1.081E-03	.0470	1.215E-03	.0528	7.245E-04
NOS 7848(131)	15.22	14.19	8.844E-04	.0384	1.081E-03	.0470	1.215E-03	.0528	7.245E-04
TOP 6295(300)	16.29	15.27	5.003E-03	.2173	6.484E-03	.2816	7.619E-03	.3309	4.055E-03
OS 1095(131)	16.29	15.27	8.526E-04	.0370	1.042E-03	.0452	1.171E-03	.0509	6.974E-04
HOT 3450(131)	16.29	15.27	8.526E-04	.0370	1.042E-03	.0452	1.171E-03	.0509	6.974E-04
NOS 7849(131)	16.29	15.27	8.526E-04	.0370	1.042E-03	.0452	1.171E-03	.0509	6.974E-04
HOT 3451(131)	17.37	16.34	8.241E-04	.0358	1.007E-03	.0437	1.132E-03	.0492	6.741E-04
TOP 6296(300)	17.40	16.37	4.832E-03	.2098	6.262E-03	.2719	7.358E-03	.3195	3.915E-03
OS 1096(131)	17.40	16.37	8.234E-04	.0358	1.006E-03	.0437	1.131E-03	.0491	6.734E-04
NOS 7850(131)	17.40	16.37	8.234E-04	.0358	1.006E-03	.0437	1.131E-03	.0491	6.734E-04
TOP 6297(300)	18.47	17.45	4.680E-03	.2032	6.066E-03	.2634	7.127E-03	.3095	3.792E-03
OS 1097(131)	18.47	17.45	7.976E-04	.0346	9.747E-04	.0423	1.096E-03	.0476	6.523E-04
HOT 3452(131)	18.47	17.45	7.976E-04	.0346	9.747E-04	.0423	1.096E-03	.0476	6.523E-04
NOS 7851(131)	18.47	17.45	7.976E-04	.0346	9.747E-04	.0423	1.096E-03	.0476	6.523E-04
TOP 6298(300)	19.57	18.55	4.539E-03	.1971	5.883E-03	.2554	6.913E-03	.3001	3.676E-03
OS 1098(131)	19.57	18.55	7.736E-04	.0336	9.453E-04	.0410	1.063E-03	.0461	6.323E-04
HOT 3453(131)	19.57	18.55	7.736E-04	.0336	9.453E-04	.0410	1.063E-03	.0461	6.323E-04
NOS 7852(131)	19.57	18.55	7.736E-04	.0336	9.453E-04	.0410	1.063E-03	.0461	6.323E-04
TOP 6299(300)	20.65	19.62	4.413E-03	.1916	5.720E-03	.2484	6.720E-03	.2918	3.576E-03
OS 1099(131)	20.65	19.62	7.521E-04	.0327	9.190E-04	.0399	1.033E-03	.0449	6.150E-04
HOT 3454(131)	20.65	19.62	7.521E-04	.0327	9.190E-04	.0399	1.033E-03	.0449	6.150E-04
NOS 7853(131)	20.65	19.62	7.521E-04	.0327	9.190E-04	.0399	1.033E-03	.0449	6.150E-04

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
27	1	7.97	431.4	1294	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.045	2.013	3795	4.023E-05	7.601E-08	2.009E 06	2.303E-02	1.900E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7652	131	77	.0497	7.138E-02	6.7034E-02
UP SIDE(US)	8494	131	77	.0497	7.138E-02	6.7034E-02
BOTTOM(BOT)	8037	131	77	.0497	7.138E-02	6.7034E-02
TOP(TOP)	8377	300	77	.0568	2.948E-01	3.4415E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6300(300)	21.75	20.72	4.294E-03	.1865	5.565E-03	.2417	6.539E-03	.2840	3.480E-03
OS 1100(131)	21.75	20.72	7.318E-04	.0318	8.943E-04	.0388	1.005E-03	.0437	5.985E-04
HOT 3455(131)	21.75	20.72	7.318E-04	.0318	8.943E-04	.0388	1.005E-03	.0437	5.985E-04
NOS 7854(131)	21.75	20.72	7.318E-04	.0318	8.943E-04	.0388	1.005E-03	.0437	5.985E-04
TOP 6301(300)	22.83	21.80	4.187E-03	.1819	5.426E-03	.2357	6.376E-03	.2770	3.395E-03
OS 1101(131)	22.83	21.80	7.135E-04	.0310	8.719E-04	.0379	9.803E-04	.0426	5.839E-04
HOT 3456(131)	22.83	21.80	7.135E-04	.0310	8.719E-04	.0379	9.803E-04	.0426	5.839E-04
NOS 7855(131)	22.83	21.80	7.135E-04	.0310	8.719E-04	.0379	9.803E-04	.0426	5.839E-04
HOT 3457(131)	23.90	22.88	6.966E-04	.0302	8.511E-04	.0370	9.570E-04	.0416	5.698E-04
TOP 6302(300)	23.93	22.90	4.085E-03	.1775	5.294E-03	.2300	6.221E-03	.2702	3.313E-03
OS 1102(131)	23.93	22.90	6.962E-04	.0302	8.507E-04	.0370	9.565E-04	.0416	5.698E-04
NOS 7856(131)	23.93	22.90	6.962E-04	.0302	8.507E-04	.0370	9.565E-04	.0416	5.698E-04
TOP 6303(300)	25.00	23.98	3.992E-03	.1734	5.174E-03	.2247	6.079E-03	.2640	3.236E-03
OS 1103(131)	25.00	23.98	6.804E-04	.0295	8.314E-04	.0361	9.347E-04	.0406	5.565E-04
HOT 3458(131)	25.00	23.98	6.804E-04	.0295	8.314E-04	.0361	9.347E-04	.0406	5.565E-04
NOS 7857(131)	25.00	23.98	6.804E-04	.0295	8.314E-04	.0361	9.347E-04	.0406	5.565E-04
HOT 3459(131)	26.08	25.05	6.656E-04	.0289	8.133E-04	.0353	9.144E-04	.0397	5.440E-04
TOP 6304(300)	26.11	25.08	3.903E-03	.1695	5.059E-03	.2197	5.944E-03	.2581	3.162E-03
OS 1104(131)	26.11	25.08	6.653E-04	.0289	8.129E-04	.0353	9.140E-04	.0397	5.439E-04
NOS 7858(131)	26.11	25.08	6.653E-04	.0289	8.129E-04	.0353	9.140E-04	.0397	5.439E-04
TOP 6305(300)	27.18	26.16	3.822E-03	.1660	4.954E-03	.2152	5.821E-03	.2528	3.099E-03
OS 1105(131)	27.18	26.16	6.514E-04	.0283	7.960E-04	.0346	8.950E-04	.0389	5.330E-04
HOT 3460(131)	27.18	26.16	6.514E-04	.0283	7.960E-04	.0346	8.950E-04	.0389	5.330E-04
NOS 7859(131)	27.18	26.16	6.514E-04	.0283	7.960E-04	.0346	8.950E-04	.0389	5.330E-04
OS 1106(131)	28.26	27.23	6.384E-04	.0277	7.801E-04	.0339	8.771E-04	.0381	5.221E-04
HOT 3461(131)	28.26	27.23	6.384E-04	.0277	7.801E-04	.0339	8.771E-04	.0381	5.221E-04

NASA-RI OH58

VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

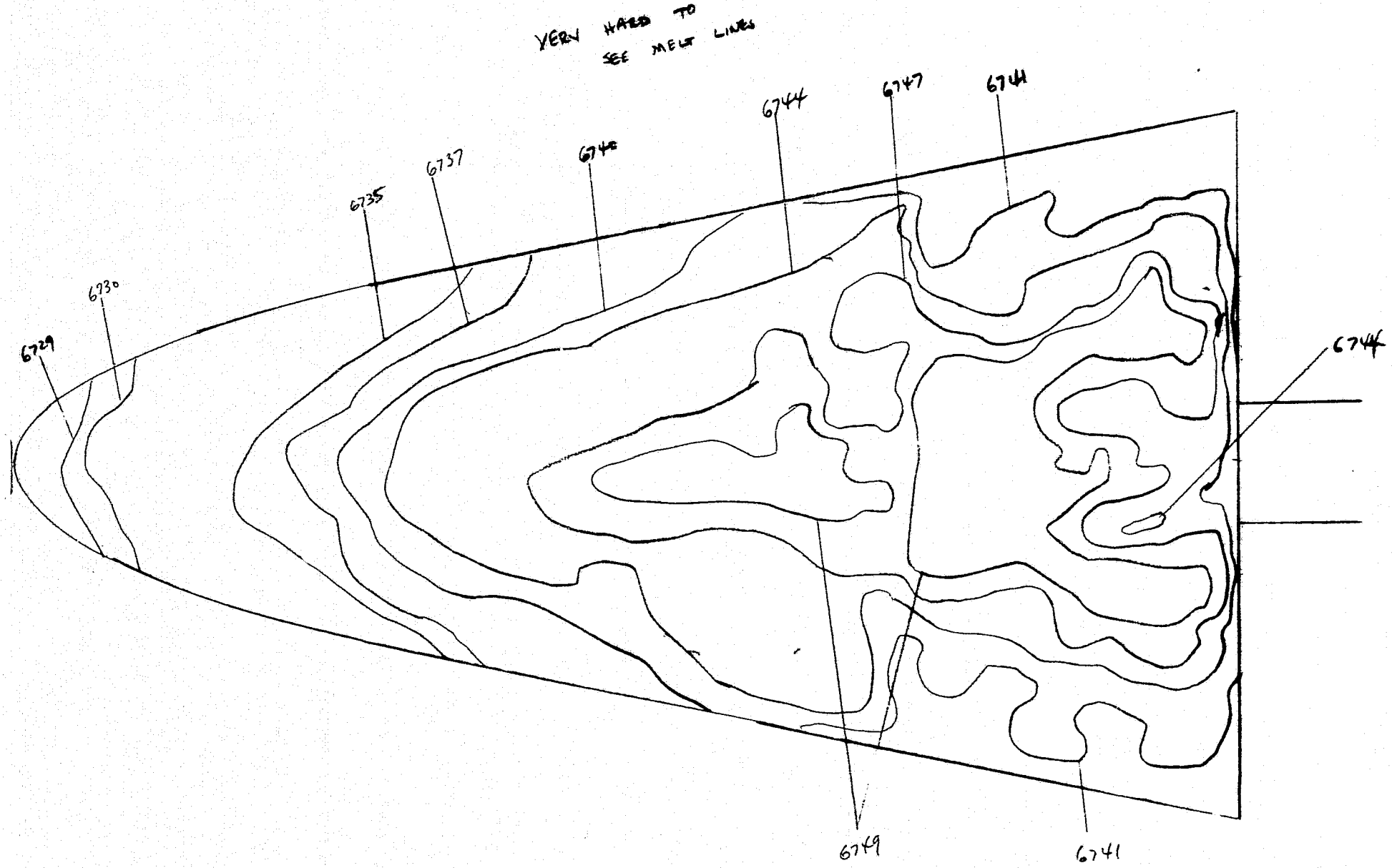
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
27	1	7.97	431.4	1254	30.01	-.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.045	2.013	3795	4.023E-05	7.602E-08	2.008E 06	2.303E-02	1.900E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7652	131	77	.0497	7.138E-02	6.7034E-02
UP SIDE(US)	8494	131	77	.0497	7.138E-02	6.7034E-02
BOTTOM(BOT)	8037	131	77	.0497	7.138E-02	6.7034E-02
TOP(TOP)	8377	300	77	.0568	2.948E-01	3.4415E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6306(300)	28.28	27.26	3.744E-03	.1625	4.853E-03	.2107	5.702E-03	.2475	3.033E-03
NOS 7860(131)	28.28	27.26	6.381E-04	.0277	7.798E-04	.0339	8.767E-04	.0381	5.216E-04
TOP 6307(300)	29.36	28.33	3.672E-03	.1595	4.760E-03	.2067	5.593E-03	.2429	2.977E-03
OS 1107(131)	29.36	28.33	6.259E-04	.0272	7.648E-04	.0332	8.599E-04	.0373	5.121E-04
HOT 3462(131)	29.36	28.33	6.259E-04	.0272	7.648E-04	.0332	8.599E-04	.0373	5.121E-04
NOS 7861(131)	29.36	28.33	6.259E-04	.0272	7.648E-04	.0332	8.599E-04	.0373	5.121E-04
	29.93		MODEL HAS LEFT CENTERLINE						
TOP 6308(300)	30.44	29.41	3.605E-03	.1564	4.672E-03	.2028	5.489E-03	.2382	2.918E-03
OS 1108(131)	30.44	29.41	6.143E-04	.0267	7.507E-04	.0326	8.440E-04	.0366	5.018E-04
HOT 3463(131)	30.44	29.41	6.143E-04	.0267	7.507E-04	.0326	8.440E-04	.0366	5.018E-04
NOS 7862(131)	30.46	29.43	6.141E-04	.0266	7.504E-04	.0326	8.437E-04	.0366	5.016E-04
TOP 6309(300)	31.54	30.51	3.539E-03	.1535	4.587E-03	.1990	5.389E-03	.2338	2.863E-03
OS 1109(131)	31.54	30.51	6.031E-04	.0262	7.370E-04	.0320	8.287E-04	.0360	4.925E-04
HOT 3464(131)	31.54	30.51	6.031E-04	.0262	7.370E-04	.0320	8.287E-04	.0360	4.925E-04
NOS 7863(131)	31.54	30.51	6.031E-04	.0262	7.370E-04	.0320	8.287E-04	.0360	4.925E-04

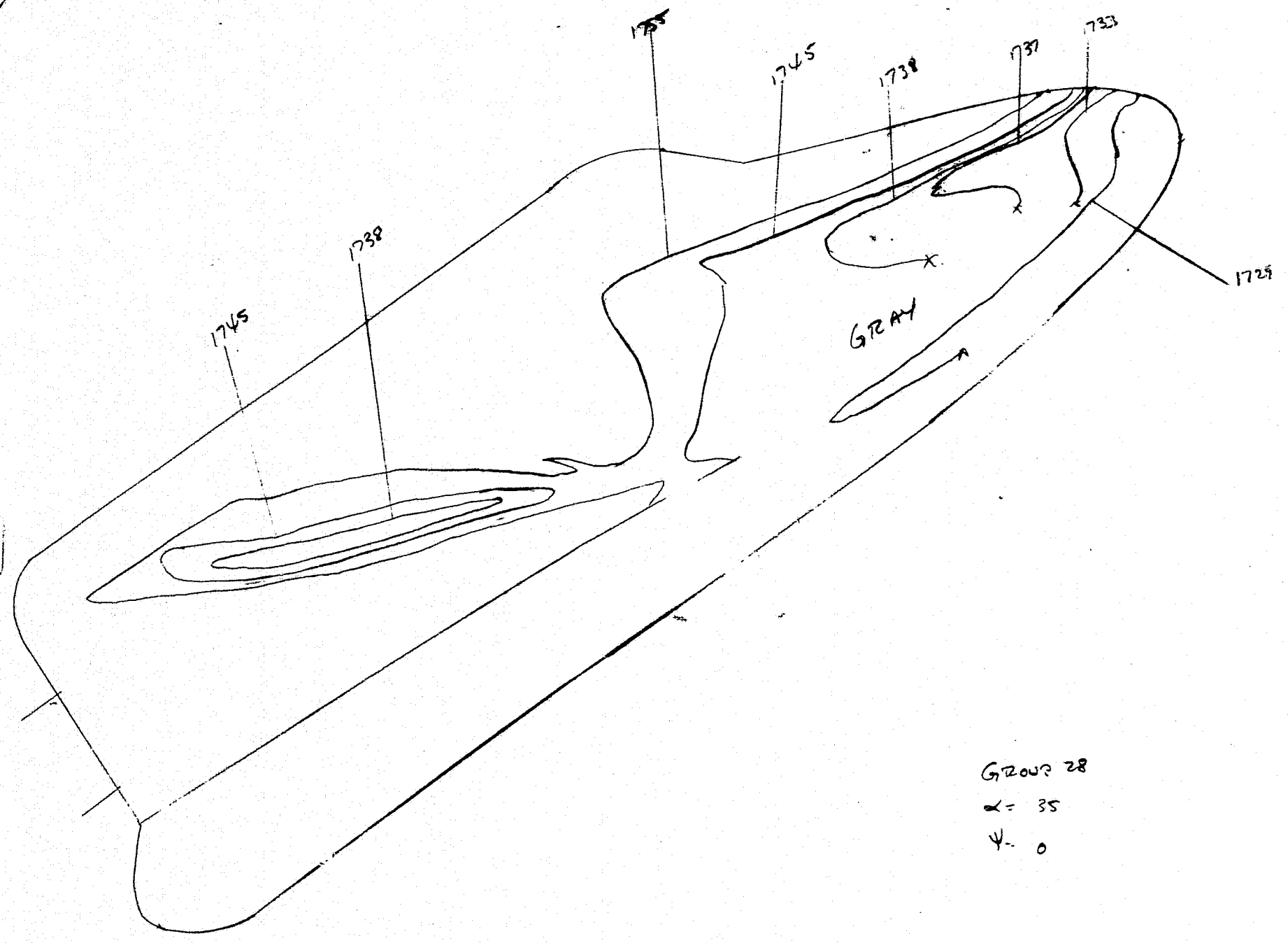
AM-504



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GROUP 28
$\alpha = 35$
$\Psi = 0$

OH · 50A

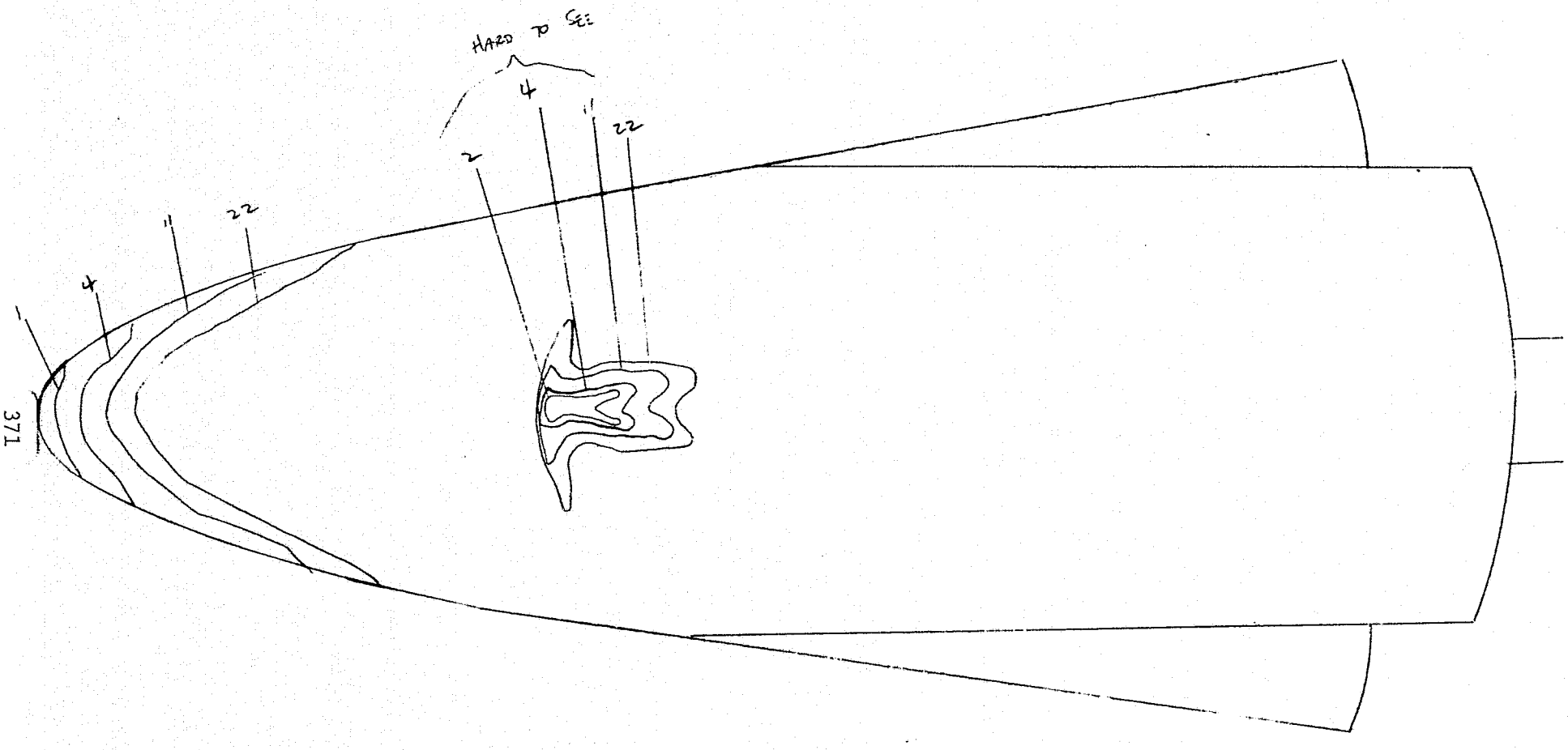


GROUP 28

$\alpha = 35$

$\psi = 0$

FRAME 1 - MODEL ON CENTERLINE



371

GROUP 28

$\alpha = 35$

$\psi = 0$

4/10/74

NASA-RI 0H58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
28	0	7.94	214.5	1276	35.00	-5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.8	.023	1.018	3767	2.065E-05	7.549E-08	1.030E 06	1.634E-02	2.648E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	77	.0486	0	0
OP SIDE(OS)	7801	113	77	.0486	0	0
BOTTOM(BOT)	8058	113	77	.0486	0	0
TOP(TOP)	8011	169	77	.0515	0	0

	PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TO	6726(169)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS	1726(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO	3726(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO	8326(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO	6727(169)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS	1727(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO	3727(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO	8327(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =		1.75								
TOP	6728(169)	2.18	1.19	5.773E-03	.3530	7.146E-03	.4369	8.111E-03	.4960	9.239E-03
OS	1728(113)	2.18	1.19	1.997E-03	.1221	2.434E-03	.1489	2.735E-03	.1672	3.205E-03
HOT	3728(113)	2.18	1.19	1.997E-03	.1221	2.434E-03	.1489	2.735E-03	.1672	3.205E-03
NOS	8328(113)	2.18	1.19	1.997E-03	.1221	2.434E-03	.1489	2.735E-03	.1672	3.205E-03
TOP	6729(169)	3.25	2.27	4.186E-03	.2561	5.182E-03	.3170	5.882E-03	.3598	6.706E-03
OS	1729(113)	3.25	2.27	1.448E-03	.0886	1.765E-03	.1080	1.983E-03	.1213	2.326E-03
HOT	3729(113)	3.25	2.27	1.448E-03	.0886	1.765E-03	.1080	1.983E-03	.1213	2.326E-03
NOS	8329(113)	3.25	2.27	1.449E-03	.0886	1.765E-03	.1080	1.983E-03	.1213	2.326E-03
TOP	6730(169)	4.33	3.35	3.448E-03	.2110	4.268E-03	.2612	4.845E-03	.2964	5.526E-03
OS	1730(113)	4.33	3.35	1.193E-03	.0730	1.454E-03	.0890	1.633E-03	.0999	1.917E-03
HOT	3730(113)	4.33	3.35	1.193E-03	.0730	1.454E-03	.0890	1.633E-03	.0999	1.917E-03
NOS	8330(113)	4.36	3.37	1.188E-03	.0727	1.449E-03	.0886	1.627E-03	.0996	1.910E-03
TOP	6731(169)	5.41	4.42	2.999E-03	.1837	3.713E-03	.2273	4.214E-03	.2581	4.813E-03
OS	1731(113)	5.41	4.42	1.037E-03	.0635	1.265E-03	.0774	1.421E-03	.0870	1.670E-03
HOT	3731(113)	5.43	4.45	1.034E-03	.0633	1.261E-03	.0772	1.417E-03	.0867	1.664E-03
NOS	8331(113)	5.43	4.45	1.034E-03	.0633	1.261E-03	.0772	1.417E-03	.0867	1.664E-03
TOP	6732(169)	6.51	5.52	2.684E-03	.1643	3.322E-03	.2034	3.771E-03	.2309	4.307E-03
OS	1732(113)	6.51	5.52	9.282E-04	.0568	1.132E-03	.0693	1.271E-03	.0778	1.494E-03
HOT	3732(113)	6.51	5.52	9.282E-04	.0568	1.132E-03	.0693	1.271E-03	.0778	1.494E-03
NOS	8332(113)	6.51	5.52	9.282E-04	.0568	1.132E-03	.0693	1.271E-03	.0778	1.494E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

4/10/74

NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
28	0	7.94	214.3	1276	35.00	-5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.8	.023	1.017	3767	2.063E-05	7.548E-08	1.030E 06	1.633E-02	2.650E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	77	.0486	4.872E-02	4.4889E-02
OP SIDE(OS)	7801	113	77	.0486	4.872E-02	4.4889E-02
BOTTOM(BOT)	8058	113	77	.0486	4.872E-02	4.4889E-02
TOP(TOP)	8011	169	77	.0515	1.245E-01	1.2248E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
BOT 3733(113)	7.58	6.60	8.492E-04	.0520	1.035E-03	.0634	1.163E-03	.0713	1.369E-03
TOP 6733(169)	7.61	6.63	2.451E-03	.1501	3.033E-03	.1858	3.443E-03	.2109	3.936E-03
OS 1733(113)	7.61	6.63	8.476E-04	.0519	1.033E-03	.0633	1.161E-03	.0711	1.366E-03
NOS 8333(113)	7.61	6.63	8.476E-04	.0519	1.033E-03	.0633	1.161E-03	.0711	1.366E-03
TOP 6734(169)	8.68	7.70	2.273E-03	.1393	2.813E-03	.1724	3.194E-03	.1957	3.654E-03
OS 1734(113)	8.68	7.70	7.861E-04	.0482	9.585E-04	.0587	1.077E-03	.0660	1.268E-03
BOT 3734(113)	8.68	7.70	7.861E-04	.0482	9.585E-04	.0587	1.077E-03	.0660	1.268E-03
NOS 8334(113)	8.68	7.70	7.861E-04	.0482	9.585E-04	.0587	1.077E-03	.0660	1.268E-03
TOP 6735(169)	9.76	8.78	2.129E-03	.1306	2.635E-03	.1616	2.991E-03	.1835	3.428E-03
OS 1735(113)	9.76	8.78	7.364E-04	.0452	8.978E-04	.0551	1.009E-03	.0619	1.189E-03
BOT 3735(113)	9.76	8.78	7.364E-04	.0452	8.978E-04	.0551	1.009E-03	.0619	1.189E-03
NOS 8335(113)	9.79	8.80	7.353E-04	.0451	8.965E-04	.0550	1.007E-03	.0618	1.188E-03
TOP 6736(169)	10.84	9.85	2.009E-03	.1233	2.487E-03	.1526	2.823E-03	.1732	3.237E-03
OS 1736(113)	10.86	9.88	6.941E-04	.0426	8.463E-04	.0519	9.507E-04	.0583	1.121E-03
BOT 3736(113)	10.86	9.88	6.941E-04	.0426	8.463E-04	.0519	9.507E-04	.0583	1.121E-03
NOS 8336(113)	10.86	9.88	6.941E-04	.0426	8.463E-04	.0519	9.507E-04	.0583	1.121E-03
TOP 6737(169)	11.94	10.96	1.906E-03	.1170	2.359E-03	.1448	2.678E-03	.1643	3.072E-03
OS 1737(113)	11.94	10.96	6.591E-04	.0405	8.036E-04	.0493	9.028E-04	.0554	1.066E-03
BOT 3737(113)	11.94	10.96	6.591E-04	.0405	8.036E-04	.0493	9.028E-04	.0554	1.066E-03
NOS 8337(113)	11.94	10.96	6.591E-04	.0405	8.036E-04	.0493	9.028E-04	.0554	1.066E-03
BOT 3738(113)	13.01	12.03	6.290E-04	.0386	7.669E-04	.0471	8.615E-04	.0529	1.017E-03
TOP 6738(169)	13.04	12.06	1.817E-03	.1115	2.249E-03	.1380	2.552E-03	.1567	2.930E-03
OS 1738(113)	13.04	12.06	6.283E-04	.0386	7.661E-04	.0470	8.606E-04	.0528	1.016E-03
NOS 8338(113)	13.04	12.06	6.283E-04	.0386	7.661E-04	.0470	8.606E-04	.0528	1.016E-03
TOP 6739(169)	14.12	13.13	1.741E-03	.1069	2.154E-03	.1323	2.446E-03	.1502	2.810E-03
OS 1739(113)	14.12	13.13	6.020E-04	.0370	7.340E-04	.0451	8.246E-04	.0506	9.748E-04
BOT 3739(113)	14.12	13.13	6.020E-04	.0370	7.340E-04	.0451	8.246E-04	.0506	9.748E-04
NOS 8339(113)	14.12	13.13	6.020E-04	.0370	7.340E-04	.0451	8.246E-04	.0506	9.748E-04

4/10/74

NASA-RI 0H58

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
28	0	7.94	213.0	1275	35.00	-5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.023	1.011	3767	2.051E-05	7.546E-08	1.024E 06	1.628E-02	2.657E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	77	.0486	4.872E-02	4.4889E-02
OP SIDE(OS)	7801	113	77	.0486	4.872E-02	4.4889E-02
BOTTOM(BOT)	8058	113	77	.0486	4.872E-02	4.4889E-02
TOP(TOP)	8011	169	77	.0515	1.245E-01	1.2248E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6740(169)	15.19	14.21	1.673E-03	.1028	2.071E-03	.1273	2.351E-03	.1445	2.704E-03
OS 1740(113)	15.19	14.21	5.788E-04	.0356	7.057E-04	.0434	7.927E-04	.0487	9.380E-04
BOT 3740(113)	15.19	14.21	5.788E-04	.0356	7.057E-04	.0434	7.927E-04	.0487	9.380E-04
NOS 8340(113)	15.19	14.21	5.788E-04	.0356	7.057E-04	.0434	7.927E-04	.0487	9.380E-04
TOP 6741(169)	16.29	15.31	1.612E-03	.0991	1.995E-03	.1226	2.265E-03	.1392	2.606E-03
OS 1741(113)	16.29	15.31	5.576E-04	.0343	6.798E-04	.0418	7.637E-04	.0469	9.041E-04
BOT 3741(113)	16.29	15.31	5.576E-04	.0343	6.798E-04	.0418	7.637E-04	.0469	9.041E-04
NOS 8341(113)	16.29	15.31	5.576E-04	.0343	6.798E-04	.0418	7.637E-04	.0469	9.041E-04
TOP 6742(169)	17.37	16.39	1.558E-03	.0958	1.929E-03	.1186	2.189E-03	.1346	2.521E-03
OS 1742(113)	17.37	16.39	5.389E-04	.0331	6.571E-04	.0404	7.382E-04	.0454	8.747E-04
BOT 3742(113)	17.37	16.39	5.389E-04	.0331	6.571E-04	.0404	7.382E-04	.0454	8.747E-04
NOS 8342(113)	17.37	16.39	5.389E-04	.0331	6.571E-04	.0404	7.382E-04	.0454	8.747E-04
TOP 6743(169)	18.45	17.46	1.509E-03	.0928	1.868E-03	.1149	2.121E-03	.1304	2.444E-03
OS 1743(113)	18.45	17.46	5.221E-04	.0321	6.365E-04	.0392	7.151E-04	.0440	8.477E-04
BOT 3743(113)	18.45	17.46	5.221E-04	.0321	6.365E-04	.0392	7.151E-04	.0440	8.477E-04
NOS 8343(113)	18.47	17.49	5.217E-04	.0321	6.361E-04	.0391	7.145E-04	.0440	8.475E-04
TOP 6744(169)	19.55	18.56	1.464E-03	.0900	1.812E-03	.1115	2.057E-03	.1265	2.370E-03
OS 1744(113)	19.55	18.56	5.063E-04	.0311	6.174E-04	.0380	6.935E-04	.0427	8.222E-04
BOT 3744(113)	19.55	18.56	5.063E-04	.0311	6.174E-04	.0380	6.935E-04	.0427	8.222E-04
NOS 8344(113)	19.55	18.56	5.063E-04	.0311	6.174E-04	.0380	6.935E-04	.0427	8.222E-04
OS 1745(113)	20.62	19.64	4.923E-04	.0303	6.002E-04	.0369	6.743E-04	.0415	8.005E-04
BOT 3745(113)	20.62	19.64	4.923E-04	.0303	6.002E-04	.0369	6.743E-04	.0415	8.005E-04
NOS 8345(113)	20.62	19.64	4.923E-04	.0303	6.002E-04	.0369	6.743E-04	.0415	8.005E-04
TOP 6745(169)	20.65	19.67	1.422E-03	.0876	1.761E-03	.1084	1.999E-03	.1230	2.306E-03
BOT 3746(113)	21.70	20.72	4.793E-04	.0295	5.844E-04	.0360	6.565E-04	.0404	7.798E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

4/10/74

NASA-RT 0H50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
28	0	7.94	212.0	1275	35.00	-5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.023	1.006	3767	2.042E-05	7.546E-08	1.019E 06	1.624E-02	2.663E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	77	.0486	4.872E-02	4.4889E-02
OP SIDE(OS)	7801	113	77	.0486	4.872E-02	4.4889E-02
BOTTOM(BOT)	8058	113	77	.0486	4.872E-02	4.4889E-02
TOP(TOP)	8011	169	77	.0515	1.245E-01	1.2248E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6746(169)	21.72	20.74	1.385E-03	.0853	1.714E-03	.1055	1.946E-03	.1198	2.246E-03
OS 1746(113)	21.72	20.74	4.790E-04	.0295	5.841E-04	.0360	6.561E-04	.0404	7.793E-04
NOS 8346(113)	21.72	20.74	4.790E-04	.0295	5.841E-04	.0360	6.561E-04	.0404	7.793E-04
TOP 6747(169)	22.80	21.82	1.350E-03	.0832	1.672E-03	.1029	1.897E-03	.1168	2.191E-03
OS 1747(113)	22.80	21.82	4.671E-04	.0288	5.695E-04	.0351	6.397E-04	.0394	7.602E-04
BOT 3747(113)	22.80	21.82	4.671E-04	.0288	5.695E-04	.0351	6.397E-04	.0394	7.602E-04
NOS 8347(113)	22.80	21.82	4.671E-04	.0288	5.695E-04	.0351	6.397E-04	.0394	7.602E-04
BOT 3748(113)	23.88	22.89	4.560E-04	.0281	5.559E-04	.0342	6.245E-04	.0385	7.424E-04
TOP 6748(169)	23.90	22.92	1.318E-03	.0812	1.631E-03	.1005	1.851E-03	.1141	2.140E-03
OS 1748(113)	23.90	22.92	4.557E-04	.0281	5.556E-04	.0342	6.242E-04	.0385	7.424E-04
NOS 8348(113)	23.90	22.92	4.557E-04	.0281	5.556E-04	.0342	6.242E-04	.0385	7.424E-04
TOP 6749(169)	24.98	24.00	1.288E-03	.0794	1.594E-03	.0982	1.809E-03	.1115	2.092E-03
OS 1749(113)	24.98	24.00	4.454E-04	.0274	5.430E-04	.0335	6.100E-04	.0376	7.259E-04
BOT 3749(113)	24.98	24.00	4.454E-04	.0274	5.430E-04	.0335	6.100E-04	.0376	7.259E-04
NOS 8349(113)	24.98	24.00	4.454E-04	.0274	5.430E-04	.0335	6.100E-04	.0376	7.259E-04
TOP 6750(169)	26.05	25.07	1.260E-03	.0777	1.559E-03	.0961	1.770E-03	.1091	2.048E-03
OS 1750(113)	26.05	25.07	4.357E-04	.0269	5.312E-04	.0327	5.968E-04	.0368	7.104E-04
BOT 3750(113)	26.05	25.07	4.357E-04	.0269	5.312E-04	.0327	5.968E-04	.0368	7.104E-04
NOS 8350(113)	26.05	25.07	4.357E-04	.0269	5.312E-04	.0327	5.968E-04	.0368	7.104E-04
BOT 3751(113)	27.13	26.15	4.266E-04	.0263	5.202E-04	.0321	5.844E-04	.0360	6.957E-04
TOP 6751(169)	27.16	26.17	1.233E-03	.0760	1.526E-03	.0941	1.732E-03	.1068	2.005E-03
OS 1751(113)	27.16	26.17	4.264E-04	.0263	5.199E-04	.0321	5.841E-04	.0360	6.956E-04
NOS 8351(113)	27.16	26.17	4.264E-04	.0263	5.199E-04	.0321	5.841E-04	.0360	6.956E-04
TOP 6752(169)	28.23	27.25	1.208E-03	.0745	1.496E-03	.0922	1.698E-03	.1047	1.965E-03
OS 1752(113)	28.23	27.25	4.179E-04	.0258	5.096E-04	.0314	5.724E-04	.0353	6.818E-04
BOT 3752(113)	28.23	27.25	4.179E-04	.0258	5.096E-04	.0314	5.724E-04	.0353	6.818E-04
NOS 8352(113)	28.23	27.25	4.179E-04	.0258	5.096E-04	.0314	5.724E-04	.0353	6.818E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

4/10/74

NASA-RI OH50

VA526

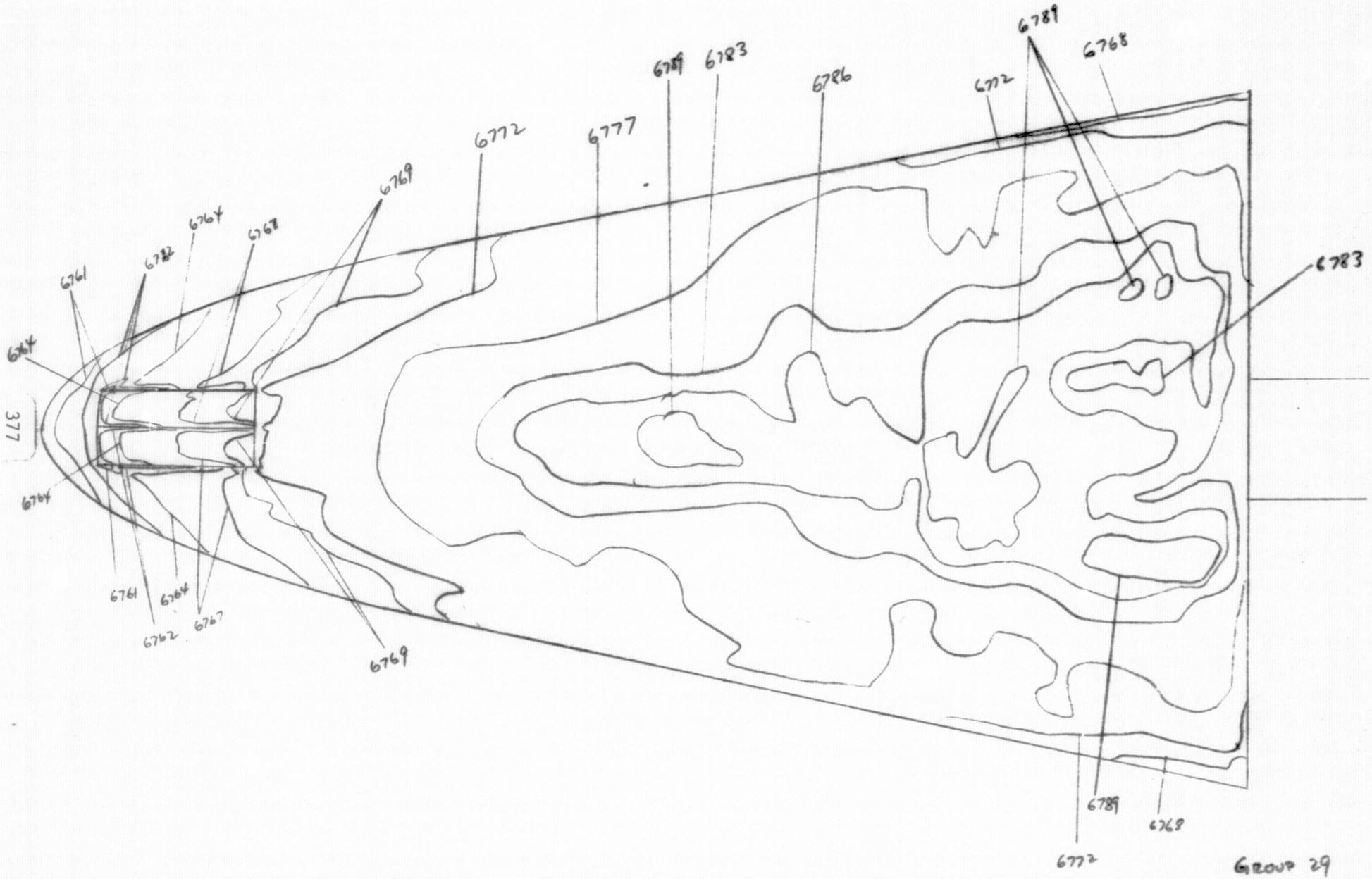
AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
26	0	7.94	211.4	1275	35.00	-5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.023	1.004	3766	2.036E-05	7.545E-08	1.016E 06	1.622E-02	2.667E-02

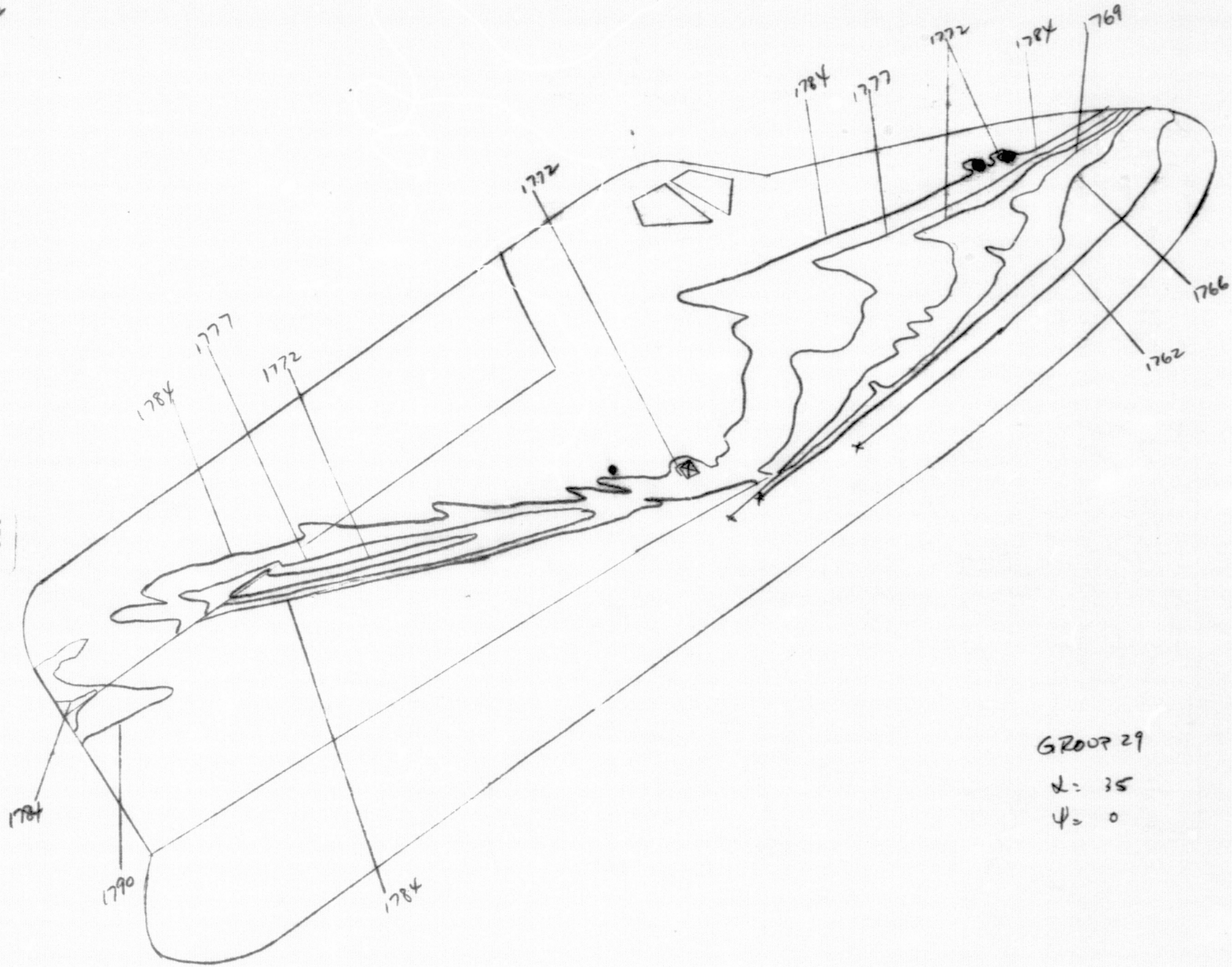
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXX)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7623	113	77	.0486	4.872E-02	4.4889E-02
OP SIDE(OS)	7601	113	77	.0486	4.872E-02	4.4889E-02
BOTTOM(BOT)	8058	113	77	.0486	4.872E-02	4.4889E-02
TOP(TOP)	8011	169	77	.0515	1.245E-01	1.2248E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
BOT 3753(113)	29.31	28.33	4.099E-04	.0253	4.998E-04	.0308	5.614E-04	.0346	6.687E-04
TOP 6753(169)	29.33	28.35	1.185E-03	.0731	1.466E-03	.0904	1.665E-03	.1027	1.928E-03
OS 1753(113)	29.33	28.35	4.097E-04	.0253	4.996E-04	.0308	5.612E-04	.0346	6.687E-04
NOS 8353(113)	29.33	28.35	4.097E-04	.0253	4.996E-04	.0308	5.612E-04	.0346	6.687E-04
TOP 6754(169)	30.41	29.43	1.163E-03	.0717	1.439E-03	.0887	1.634E-03	.1007	1.891E-03
OS 1754(113)	30.41	29.43	4.022E-04	.0248	4.903E-04	.0302	5.508E-04	.0340	6.561E-04
BOT 3754(113)	30.41	29.43	4.022E-04	.0248	4.903E-04	.0302	5.508E-04	.0340	6.561E-04
NOS 8354(113)	30.41	29.43	4.022E-04	.0248	4.903E-04	.0302	5.508E-04	.0340	6.561E-04
TOP 6755(169)	31.49	30.50	1.142E-03	.0704	1.414E-03	.0872	1.605E-03	.0989	1.858E-03
OS 1755(113)	31.49	30.50	3.950E-04	.0244	4.816E-04	.0297	5.410E-04	.0334	6.444E-04
BOT 3755(113)	31.49	30.50	3.950E-04	.0244	4.816E-04	.0297	5.410E-04	.0334	6.444E-04
NOS 8355(113)	31.51	30.53	3.949E-04	.0243	4.814E-04	.0297	5.408E-04	.0333	6.438E-04
TOP 6756(169)	32.59	31.60	1.122E-03	.0692	1.389E-03	.0856	1.576E-03	.0972	1.825E-03
OS 1756(113)	32.59	31.60	3.881E-04	.0239	4.732E-04	.0292	5.315E-04	.0328	6.331E-04
BOT 3756(113)	32.59	31.60	3.881E-04	.0239	4.732E-04	.0292	5.315E-04	.0328	6.331E-04
NOS 8356(113)	32.59	31.60	3.881E-04	.0239	4.732E-04	.0292	5.315E-04	.0328	6.331E-04
TOP 6757(169)	33.66	32.68	1.103E-03	.0680	1.366E-03	.0842	1.550E-03	.0955	1.793E-03
OS 1757(113)	33.66	32.68	3.816E-04	.0235	4.653E-04	.0287	5.227E-04	.0322	6.220E-04
BOT 3757(113)	33.66	32.68	3.816E-04	.0235	4.653E-04	.0287	5.227E-04	.0322	6.220E-04
NOS 8357(113)	33.66	32.68	3.816E-04	.0235	4.653E-04	.0287	5.227E-04	.0322	6.220E-04
	33.69		MODEL HAS LEFT CENTERLINE						
TOP 6758(169)	34.74	33.76	1.086E-03	.0669	1.344E-03	.0828	1.525E-03	.0940	1.765E-03
OS 1758(113)	34.76	33.78	3.754E-04	.0231	4.577E-04	.0282	5.141E-04	.0317	6.118E-04
BOT 3758(113)	34.76	33.78	3.754E-04	.0231	4.577E-04	.0282	5.141E-04	.0317	6.118E-04
NOS 8358(113)	34.76	33.78	3.754E-04	.0231	4.577E-04	.0282	5.141E-04	.0317	6.118E-04



GROUP 29
$\alpha = 35$
$\psi = 0$

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



GROUP 29

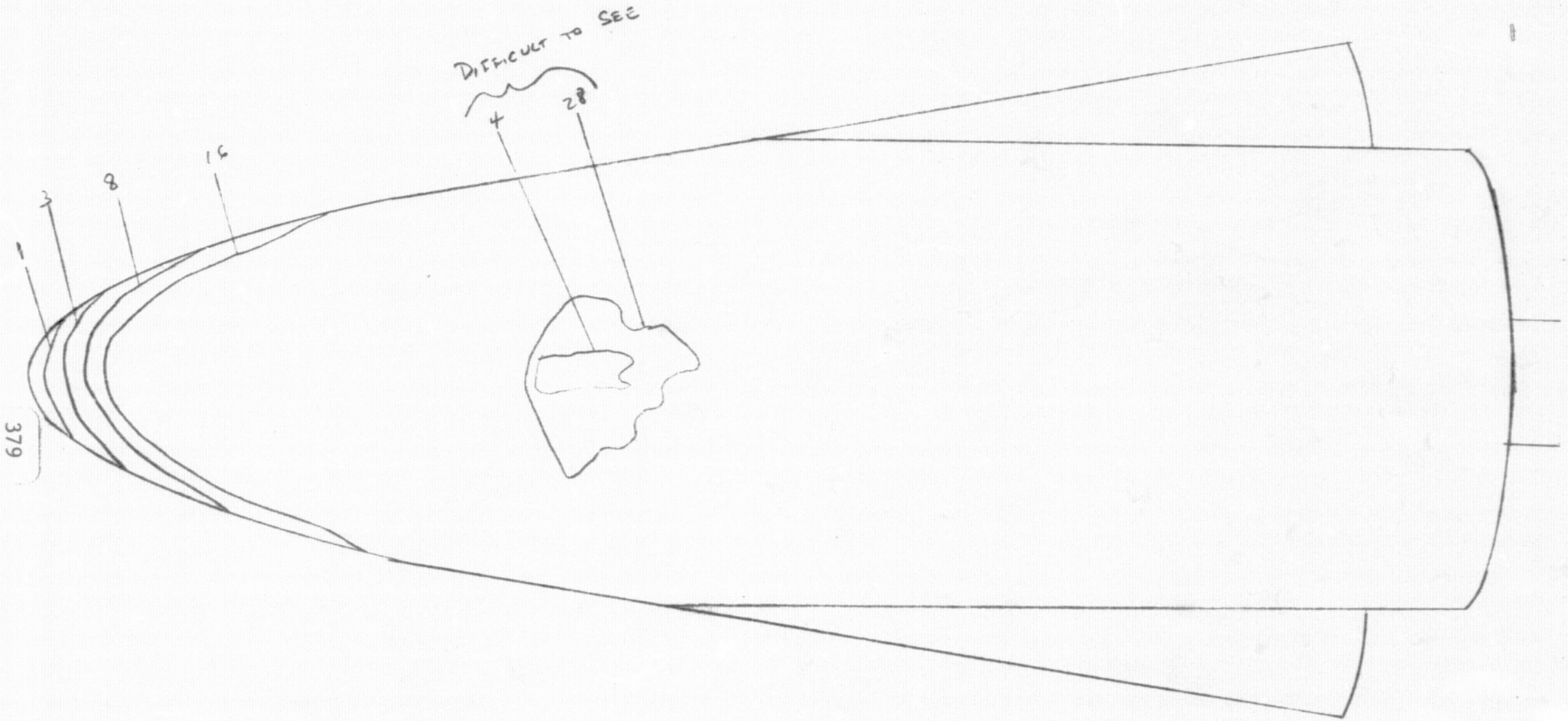
$\alpha = 35$

$\psi = 0$

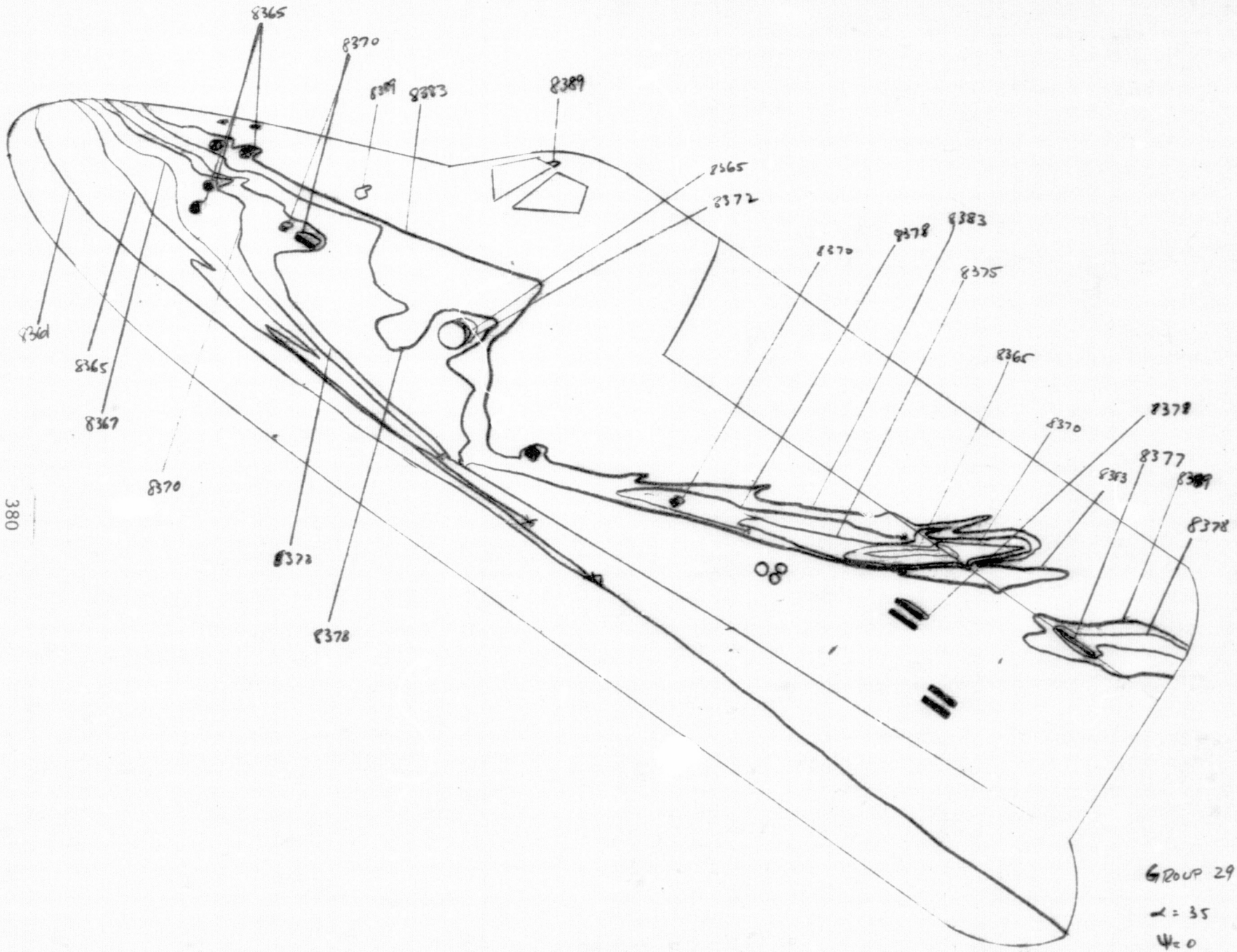
REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

OH-50A

FRAME 1 - MODEL ON CENTERLINE
CAN NOT SEE THE PENETRATIONS



GROUP 29
$\alpha = 35$
$\psi = 0$


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GROUP 29
α = 35
Ψ = 0

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
29	0	7.94	211.9	1278	35.00	-5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.9	.023	1.006	3771	2.036E-05	7.563E-08	1.015E 06	1.625E-02	2.668E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	76	.0486	0	0
OP SIDE(OS)	7E01	113	76	.0486	0	0
BOTTOM(BOT)	8058	113	76	.0486	0	0
TOP(TOP)	8011	175	76	.0510	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
RO 3759(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 6759(175)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 1759(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 8359(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 6760(175)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 1760(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
RO 3760(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 8360(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.75								
TOP 6761(175)	2.18	1.19	6.273E-03	.3861	7.776E-03	.4785	8.834E-03	.5436	1.018E-02
OS 1761(113)	2.18	1.19	2.045E-03	.1259	2.493E-03	.1534	2.798E-03	.1722	3.330E-03
BOT 3761(113)	2.18	1.19	2.045E-03	.1259	2.493E-03	.1534	2.798E-03	.1722	3.330E-03
NOS 8361(113)	2.18	1.19	2.045E-03	.1259	2.493E-03	.1534	2.798E-03	.1722	3.330E-03
TOP 6762(175)	3.25	2.27	4.549E-03	.2800	5.639E-03	.3471	6.406E-03	.3944	7.387E-03
OS 1762(113)	3.25	2.27	1.483E-03	.0913	1.806E-03	.1113	2.029E-03	.1249	2.416E-03
BOT 3762(113)	3.25	2.27	1.483E-03	.0913	1.808E-03	.1113	2.029E-03	.1249	2.416E-03
NOS 8362(113)	3.25	2.27	1.483E-03	.0913	1.806E-03	.1113	2.029E-03	.1249	2.416E-03
TOP 6763(175)	4.33	3.35	3.747E-03	.2305	4.645E-03	.2858	5.276E-03	.3247	6.078E-03
OS 1763(113)	4.33	3.35	1.221E-03	.0752	1.489E-03	.0916	1.671E-03	.1028	1.988E-03
BOT 3763(113)	4.33	3.35	1.221E-03	.0752	1.489E-03	.0916	1.671E-03	.1028	1.988E-03
NOS 8363(113)	4.33	3.35	1.221E-03	.0752	1.489E-03	.0916	1.671E-03	.1028	1.988E-03
TOP 6764(175)	5.43	4.45	3.250E-03	.2000	4.029E-03	.2479	4.577E-03	.2817	5.275E-03
OS 1764(113)	5.43	4.45	1.060E-03	.0652	1.292E-03	.0795	1.450E-03	.0892	1.725E-03
BOT 3764(113)	5.43	4.45	1.060E-03	.0652	1.292E-03	.0795	1.450E-03	.0892	1.725E-03
NOS 8364(113)	5.43	4.45	1.060E-03	.0652	1.292E-03	.0795	1.450E-03	.0892	1.725E-03
TOP 6765(175)	6.51	5.52	2.916E-03	.1794	3.615E-03	.2224	4.107E-03	.2527	4.731E-03
OS 1765(113)	6.51	5.52	9.507E-04	.0585	1.159E-03	.0713	1.301E-03	.0800	1.547E-03
BOT 3765(113)	6.51	5.52	9.507E-04	.0585	1.159E-03	.0713	1.301E-03	.0800	1.547E-03
NOS 8365(113)	6.51	5.52	9.507E-04	.0585	1.159E-03	.0713	1.301E-03	.0800	1.547E-03

NASA-RI OH5B — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
29	0	7.94	212.1	1278	35.00	-5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.9	.023	1.007	3771	2.038E-05	7.563E-08	1.016E 06	1.625E-02	2.666E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	76	.0486	4.985E-02	4.5977E-02
OP SIDE(OS)	7801	113	76	.0486	4.985E-02	4.5977E-02
BOTTOM(BOT)	8058	113	76	.0486	4.985E-02	4.5977E-02
TOP(TOP)	8011	175	76	.0518	1.334E-01	1.3232E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
BOT 3766(113)	7.58	6.68	8.698E-04	.0535	1.060E-03	.0653	1.190E-03	.0733	1.417E-03
TOP 6766(175)	7.61	6.63	2.663E-03	.1639	3.301E-03	.2031	3.750E-03	.2308	4.322E-03
OS 1766(113)	7.61	6.63	8.681E-04	.0534	1.058E-03	.0651	1.188E-03	.0731	1.414E-03
NOS 8366(113)	7.61	6.63	8.681E-04	.0534	1.058E-03	.0651	1.188E-03	.0731	1.414E-03
TOP 6767(175)	8.68	7.70	2.470E-03	.1520	3.062E-03	.1885	3.478E-03	.2141	4.010E-03
OS 1767(113)	8.68	7.70	8.052E-04	.0496	9.815E-04	.0604	1.102E-03	.0678	1.312E-03
BOT 3767(113)	8.68	7.70	8.052E-04	.0496	9.815E-04	.0604	1.102E-03	.0678	1.312E-03
NOS 8367(113)	8.68	7.70	8.052E-04	.0496	9.815E-04	.0604	1.102E-03	.0678	1.312E-03
TOP 6768(175)	9.76	8.78	2.314E-03	.1423	2.868E-03	.1764	3.258E-03	.2005	3.753E-03
OS 1768(113)	9.76	8.78	7.542E-04	.0464	9.194E-04	.0566	1.032E-03	.0635	1.228E-03
BOT 3768(113)	9.76	8.78	7.542E-04	.0464	9.194E-04	.0566	1.032E-03	.0635	1.228E-03
NOS 8368(113)	9.76	8.78	7.542E-04	.0464	9.194E-04	.0566	1.032E-03	.0635	1.228E-03
TOP 6769(175)	10.86	9.88	2.181E-03	.1343	2.703E-03	.1664	3.071E-03	.1891	3.543E-03
OS 1769(113)	10.86	9.88	7.109E-04	.0438	8.666E-04	.0534	9.728E-04	.0599	1.159E-03
BOT 3769(113)	10.86	9.88	7.109E-04	.0438	8.666E-04	.0534	9.728E-04	.0599	1.159E-03
NOS 8369(113)	10.86	9.88	7.109E-04	.0438	8.666E-04	.0534	9.728E-04	.0599	1.159E-03
TOP 6770(175)	11.94	10.96	2.071E-03	.1274	2.567E-03	.1579	2.916E-03	.1794	3.360E-03
OS 1770(113)	11.94	10.96	6.751E-04	.0415	8.230E-04	.0506	9.238E-04	.0568	1.099E-03
BOT 3770(113)	11.94	10.96	6.751E-04	.0415	8.230E-04	.0506	9.238E-04	.0568	1.099E-03
NOS 8370(113)	11.94	10.96	6.751E-04	.0415	8.230E-04	.0506	9.238E-04	.0568	1.099E-03
BOT 3771(113)	13.01	12.03	6.442E-04	.0397	7.853E-04	.0483	8.815E-04	.0543	1.050E-03
TOP 6771(175)	13.04	12.06	1.974E-03	.1215	2.447E-03	.1506	2.780E-03	.1711	3.204E-03
OS 1771(113)	13.04	12.06	6.435E-04	.0396	7.845E-04	.0483	8.806E-04	.0542	1.048E-03
NOS 8371(113)	13.04	12.06	6.435E-04	.0396	7.845E-04	.0483	8.806E-04	.0542	1.048E-03
TOP 6772(175)	14.12	13.13	1.891E-03	.1164	2.345E-03	.1443	2.664E-03	.1639	3.070E-03
OS 1772(113)	14.12	13.13	6.166E-04	.0379	7.517E-04	.0463	8.437E-04	.0519	1.004E-03
BOT 3772(113)	14.12	13.13	6.166E-04	.0379	7.517E-04	.0463	8.437E-04	.0519	1.004E-03
NOS 8372(113)	14.12	13.13	6.166E-04	.0379	7.517E-04	.0463	8.437E-04	.0519	1.004E-03

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REPRODUCED AT THE ORIGINAL AEDC

NASA-RI OHS8 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
29	8	7.94	212.0	1278	35.00	-5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.9	.023	1.006	3771	2.037E-05	7.563E-08	1.016E 06	1.625E-02	2.667E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	76	.0486	4.985E-02	4.5977E-02
OP SIDE(OS)	7801	113	76	.0486	4.985E-02	4.5977E-02
BOTTOM(BOT)	8058	113	76	.0486	4.985E-02	4.5977E-02
TOP(TOP)	8011	175	76	.0518	1.334E-01	1.3232E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6773(175)	15.19	14.21	1.818E-03	.1119	2.254E-03	.1387	2.561E-03	.1576	2.951E-03
OS 1773(113)	15.19	14.21	5.928E-04	.0365	7.226E-04	.0445	8.112E-04	.0499	9.654E-04
BOT 3773(113)	15.19	14.21	5.928E-04	.0365	7.226E-04	.0445	8.112E-04	.0499	9.654E-04
NOS 8373(113)	15.19	14.21	5.928E-04	.0365	7.226E-04	.0445	8.112E-04	.0499	9.654E-04
TOP 6774(175)	16.29	15.31	1.752E-03	.1078	2.171E-03	.1336	2.467E-03	.1518	2.843E-03
OS 1774(113)	16.29	15.31	5.711E-04	.0351	6.961E-04	.0428	7.814E-04	.0481	9.300E-04
BOT 3774(113)	16.29	15.31	5.711E-04	.0351	6.961E-04	.0428	7.814E-04	.0481	9.300E-04
NOS 8374(113)	16.29	15.31	5.711E-04	.0351	6.961E-04	.0428	7.814E-04	.0481	9.300E-04
TOP 6775(175)	17.37	16.39	1.693E-03	.1042	2.099E-03	.1291	2.384E-03	.1467	2.747E-03
OS 1775(113)	17.37	16.39	5.520E-04	.0340	6.729E-04	.0414	7.553E-04	.0465	8.985E-04
BOT 3775(113)	17.37	16.39	5.520E-04	.0340	6.729E-04	.0414	7.553E-04	.0465	8.985E-04
NOS 8375(113)	17.37	16.39	5.520E-04	.0340	6.729E-04	.0414	7.553E-04	.0465	8.985E-04
BOT 3776(113)	18.45	17.46	5.347E-04	.0329	6.518E-04	.0401	7.317E-04	.0450	8.712E-04
TOP 6776(175)	18.47	17.49	1.639E-03	.1009	2.032E-03	.1250	2.308E-03	.1420	2.660E-03
OS 1776(113)	18.47	17.49	5.343E-04	.0329	6.514E-04	.0401	7.312E-04	.0450	8.702E-04
NOS 8376(113)	18.47	17.49	5.343E-04	.0329	6.514E-04	.0401	7.312E-04	.0450	8.702E-04
TOP 6777(175)	19.55	18.56	1.591E-03	.0979	1.972E-03	.1213	2.240E-03	.1378	2.581E-03
OS 1777(113)	19.55	18.56	5.186E-04	.0319	6.322E-04	.0389	7.097E-04	.0437	8.442E-04
BOT 3777(113)	19.55	18.56	5.186E-04	.0319	6.322E-04	.0389	7.097E-04	.0437	8.442E-04
NOS 8377(113)	19.55	18.56	5.186E-04	.0319	6.322E-04	.0389	7.097E-04	.0437	8.442E-04
BOT 3778(113)	20.62	19.64	5.042E-04	.0310	6.146E-04	.0378	6.899E-04	.0425	8.211E-04
TOP 6778(175)	20.65	19.67	1.546E-03	.0951	1.916E-03	.1179	2.177E-03	.1340	2.510E-03
OS 1778(113)	20.65	19.67	5.039E-04	.0310	6.142E-04	.0378	6.895E-04	.0424	8.210E-04
NOS 8378(113)	20.65	19.67	5.039E-04	.0310	6.142E-04	.0378	6.895E-04	.0424	8.210E-04
TOP 6779(175)	21.72	20.74	1.505E-03	.0926	1.866E-03	.1148	2.119E-03	.1304	2.441E-03
OS 1779(113)	21.72	20.74	4.906E-04	.0302	5.981E-04	.0368	6.714E-04	.0413	7.983E-04
BOT 3779(113)	21.72	20.74	4.906E-04	.0302	5.981E-04	.0368	6.714E-04	.0413	7.983E-04
NOS 8379(113)	21.72	20.74	4.906E-04	.0302	5.981E-04	.0368	6.714E-04	.0413	7.983E-04

NASA-RI ONSO — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
29	B	7.94	212.2	1279	35.00	-5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.0	.023	1.007	3771	2.038E-05	7.564E-08	1.016E 06	1.626E-02	2.666E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	76	.0486	4.985E-02	4.5977E-02
OP SIDE(OS)	7801	113	76	.0486	4.985E-02	4.5977E-02
BOTTOM(BOT)	8058	113	76	.0486	4.985E-02	4.5977E-02
TOP(TOP)	8011	175	76	.0518	1.334E-01	1.3232E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
OS 1780(113)	22.80	21.82	4.784E-04	.0294	5.832E-04	.0359	6.546E-04	.0403	7.791E-04
BOT 3780(113)	22.80	21.82	4.784E-04	.0294	5.832E-04	.0359	6.546E-04	.0403	7.791E-04
TOP 6780(175)	22.83	21.84	1.467E-03	.0902	1.818E-03	.1118	2.065E-03	.1271	2.379E-03
NOS 8380(113)	22.83	21.84	4.781E-04	.0294	5.828E-04	.0359	6.542E-04	.0403	7.783E-04
TOP 6781(175)	23.90	22.92	1.432E-03	.0881	1.775E-03	.1092	2.016E-03	.1241	2.324E-03
OS 1781(113)	23.90	22.92	4.667E-04	.0287	5.690E-04	.0350	6.387E-04	.0393	7.601E-04
BOT 3781(113)	23.90	22.92	4.667E-04	.0287	5.690E-04	.0350	6.387E-04	.0393	7.601E-04
NOS 8381(113)	23.90	22.92	4.667E-04	.0287	5.690E-04	.0350	6.387E-04	.0393	7.601E-04
OS 1782(113)	24.98	24.00	4.562E-04	.0281	5.561E-04	.0342	6.242E-04	.0384	7.426E-04
BOT 3782(113)	24.98	24.00	4.562E-04	.0281	5.561E-04	.0342	6.242E-04	.0384	7.426E-04
TOP 6782(175)	25.00	24.02	1.399E-03	.0860	1.734E-03	.1067	1.969E-03	.1212	2.269E-03
NOS 8382(113)	25.00	24.02	4.559E-04	.0281	5.558E-04	.0342	6.239E-04	.0384	7.421E-04
TOP 6783(175)	26.08	25.10	1.368E-03	.0842	1.696E-03	.1044	1.927E-03	.1186	2.221E-03
OS 1783(113)	26.08	25.10	4.460E-04	.0274	5.437E-04	.0335	6.103E-04	.0376	7.264E-04
BOT 3783(113)	26.08	25.10	4.460E-04	.0274	5.437E-04	.0335	6.103E-04	.0376	7.264E-04
NOS 8383(113)	26.08	25.10	4.460E-04	.0274	5.437E-04	.0335	6.103E-04	.0376	7.264E-04
TOP 6784(175)	27.16	26.17	1.340E-03	.0824	1.661E-03	.1022	1.887E-03	.1161	2.174E-03
OS 1784(113)	27.16	26.17	4.368E-04	.0269	5.324E-04	.0328	5.977E-04	.0368	7.110E-04
BOT 3784(113)	27.16	26.17	4.368E-04	.0269	5.324E-04	.0328	5.977E-04	.0368	7.110E-04
NOS 8384(113)	27.16	26.17	4.368E-04	.0269	5.324E-04	.0328	5.977E-04	.0368	7.110E-04
TOP 6785(175)	28.26	27.27	1.312E-03	.0808	1.627E-03	.1001	1.848E-03	.1137	2.129E-03
OS 1785(113)	28.26	27.27	4.279E-04	.0263	5.216E-04	.0321	5.855E-04	.0360	6.964E-04
BOT 3785(113)	28.26	27.27	4.279E-04	.0263	5.216E-04	.0321	5.855E-04	.0360	6.964E-04
NOS 8385(113)	28.26	27.27	4.279E-04	.0263	5.216E-04	.0321	5.855E-04	.0360	6.964E-04
TOP 6786(175)	29.33	28.35	1.287E-03	.0792	1.596E-03	.0982	1.813E-03	.1116	2.090E-03
OS 1786(113)	29.33	28.35	4.197E-04	.0258	5.116E-04	.0315	5.743E-04	.0353	6.835E-04
BOT 3786(113)	29.33	28.35	4.197E-04	.0258	5.116E-04	.0315	5.743E-04	.0353	6.835E-04
NOS 8386(113)	29.33	28.35	4.197E-04	.0258	5.116E-04	.0315	5.743E-04	.0353	6.835E-04

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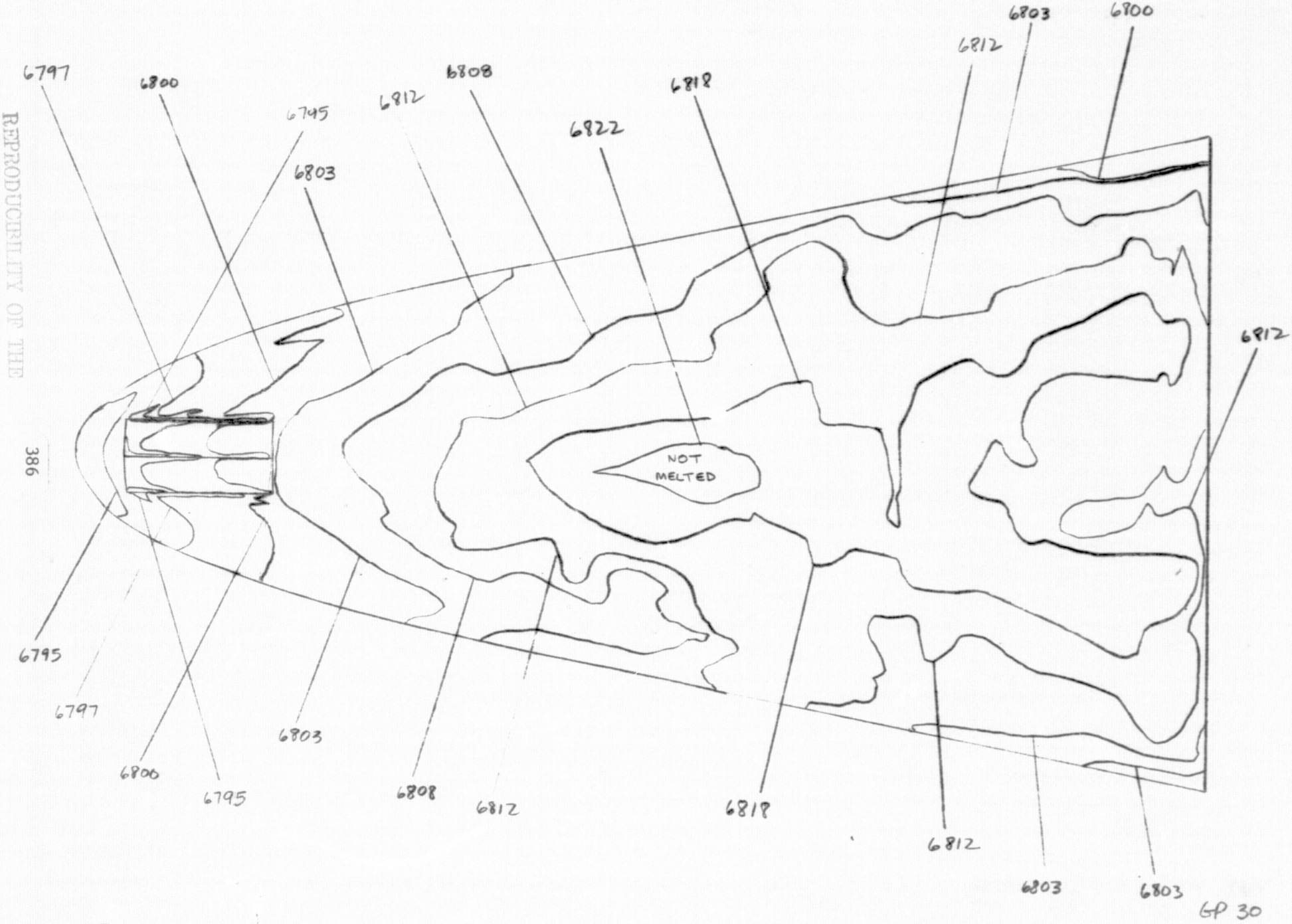
NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
29	0	7.94	212.0	1279	35.00	-5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.0	.023	1.006	3771	2.036E-05	7.565E-08	1.015E 06	1.625E-02	2.667E-02

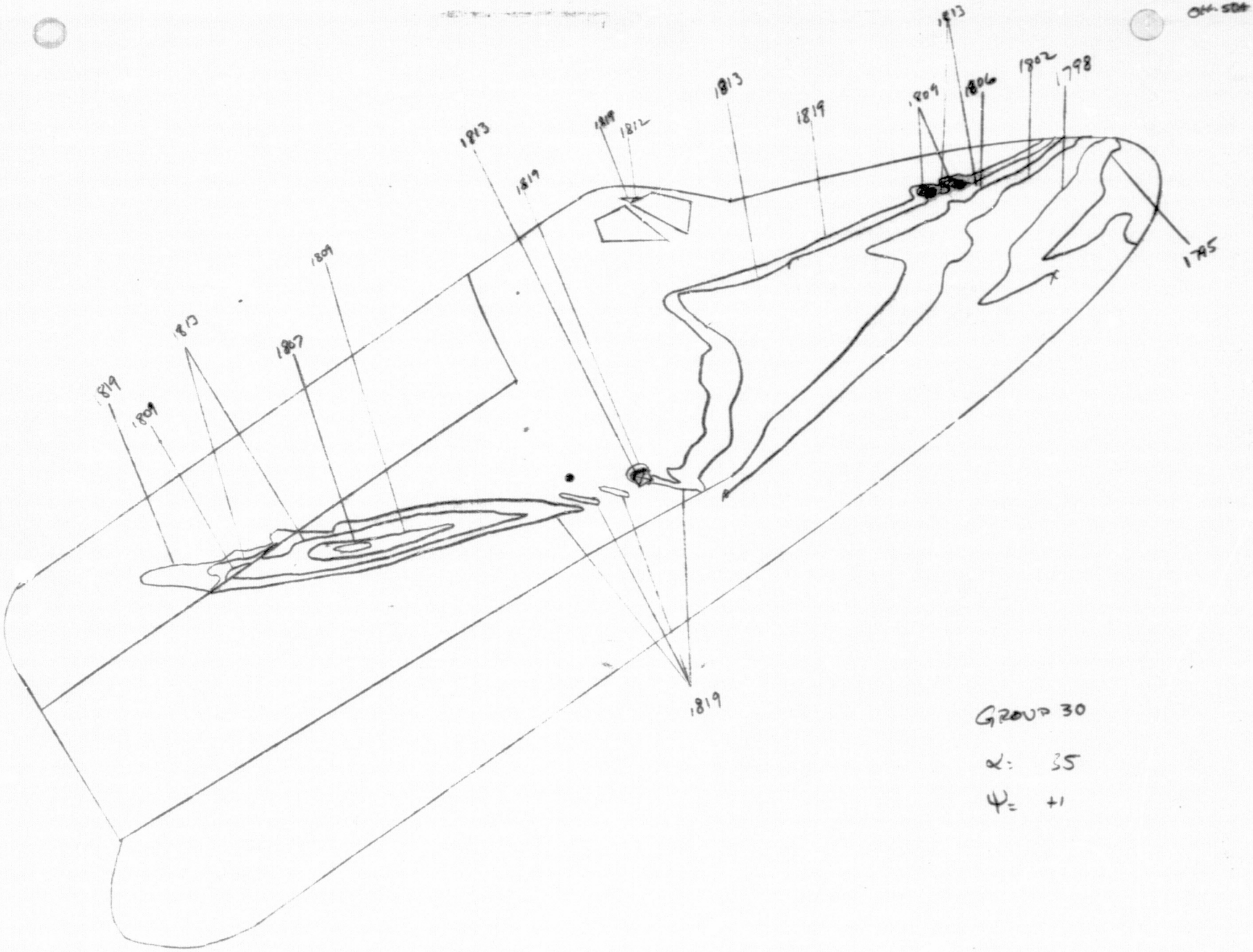
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRA(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	76	.0486	4.985E-02	4.5977E-02
UP SIDE(OS)	7801	113	76	.0486	4.985E-02	4.5977E-02
BOTTOM(BOT)	8058	113	76	.0486	4.985E-02	4.5977E-02
TOP(TOP)	8011	175	76	.0518	1.334E-01	1.3232E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6787(175)	30.44	29.45	1.263E-03	.0777	1.566E-03	.0963	1.779E-03	.1095	2.058E-03
OS 1787(113)	30.44	29.45	4.117E-04	.0253	5.019E-04	.0309	5.634E-04	.0347	6.705E-04
BOT 3787(113)	30.44	29.45	4.117E-04	.0253	5.019E-04	.0309	5.634E-04	.0347	6.705E-04
NOS 8387(113)	30.44	29.45	4.117E-04	.0253	5.019E-04	.0309	5.634E-04	.0347	6.705E-04
TOP 6788(175)	31.51	30.53	1.241E-03	.0764	1.538E-03	.0947	1.747E-03	.1075	2.015E-03
OS 1788(113)	31.51	30.53	4.044E-04	.0249	4.930E-04	.0303	5.534E-04	.0341	6.589E-04
BOT 3788(113)	31.51	30.53	4.044E-04	.0249	4.930E-04	.0303	5.534E-04	.0341	6.589E-04
NOS 8388(113)	31.51	30.53	4.044E-04	.0249	4.930E-04	.0303	5.534E-04	.0341	6.589E-04
BOT 3789(113)	32.59	31.60	3.975E-04	.0245	4.845E-04	.0298	5.439E-04	.0335	6.473E-04
TOP 6789(175)	32.61	31.63	1.219E-03	.0750	1.511E-03	.0930	1.716E-03	.1056	1.978E-03
OS 1789(113)	32.61	31.63	3.973E-04	.0245	4.843E-04	.0298	5.437E-04	.0335	6.471E-04
NOS 8389(113)	32.61	31.63	3.973E-04	.0245	4.843E-04	.0298	5.437E-04	.0335	6.471E-04
TOP 6790(175)	33.69	32.71	1.199E-03	.0738	1.486E-03	.0914	1.688E-03	.1039	1.945E-03
OS 1790(113)	33.69	32.71	3.907E-04	.0240	4.763E-04	.0293	5.347E-04	.0329	6.363E-04
BOT 3790(113)	33.69	32.71	3.907E-04	.0240	4.763E-04	.0293	5.347E-04	.0329	6.363E-04
NOS 8390(113)	33.69	32.71	3.907E-04	.0240	4.763E-04	.0293	5.347E-04	.0329	6.363E-04
	34.66		MODEL WAS LEFT CENTERLINE						
BOT 3791(113)	34.76	33.78	3.844E-04	.0237	4.687E-04	.0288	5.261E-04	.0324	6.264E-04
TOP 6791(175)	34.79	33.81	1.179E-03	.0725	1.461E-03	.0899	1.660E-03	.1022	1.914E-03
OS 1791(113)	34.79	33.81	3.843E-04	.0236	4.685E-04	.0288	5.259E-04	.0324	6.259E-04
NOS 8391(113)	34.79	33.81	3.843E-04	.0236	4.685E-04	.0288	5.259E-04	.0324	6.259E-04



GP 30

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



GROUP 30

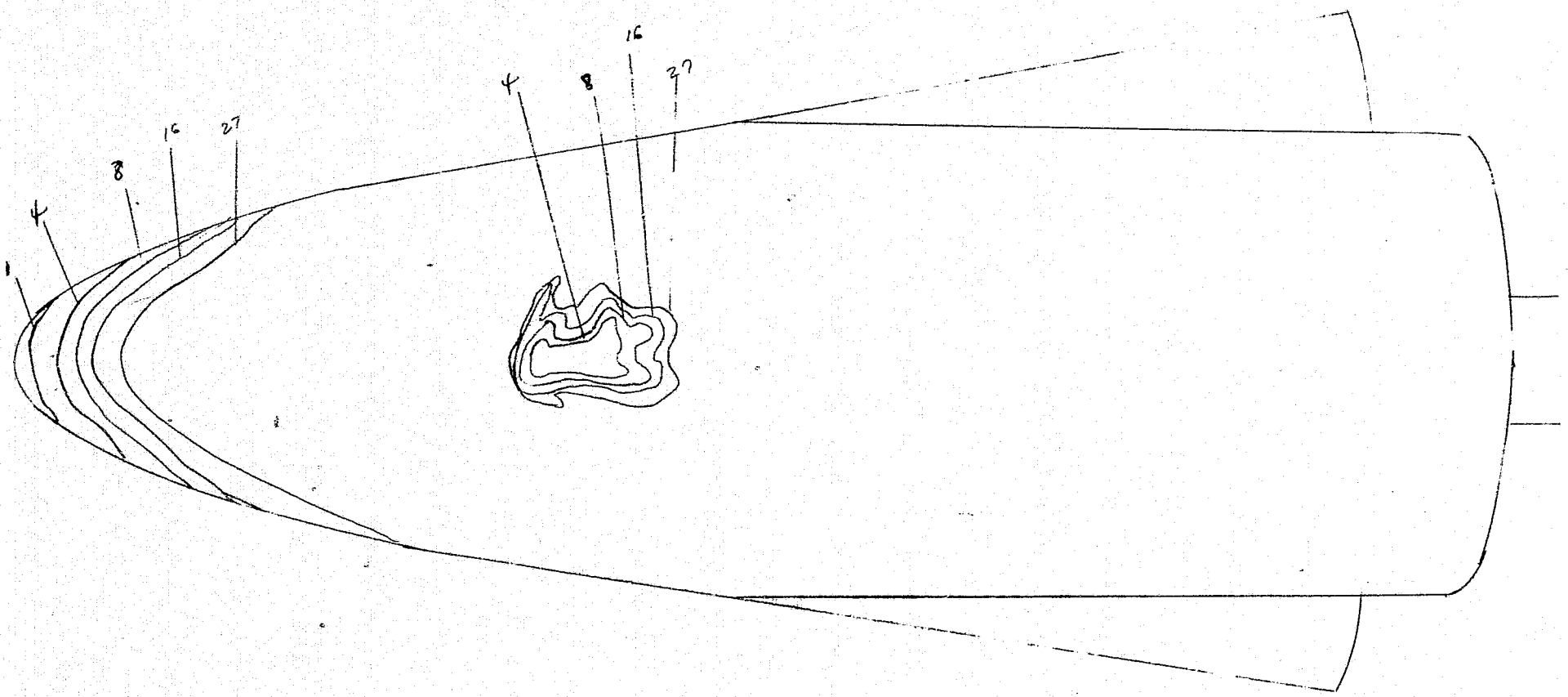
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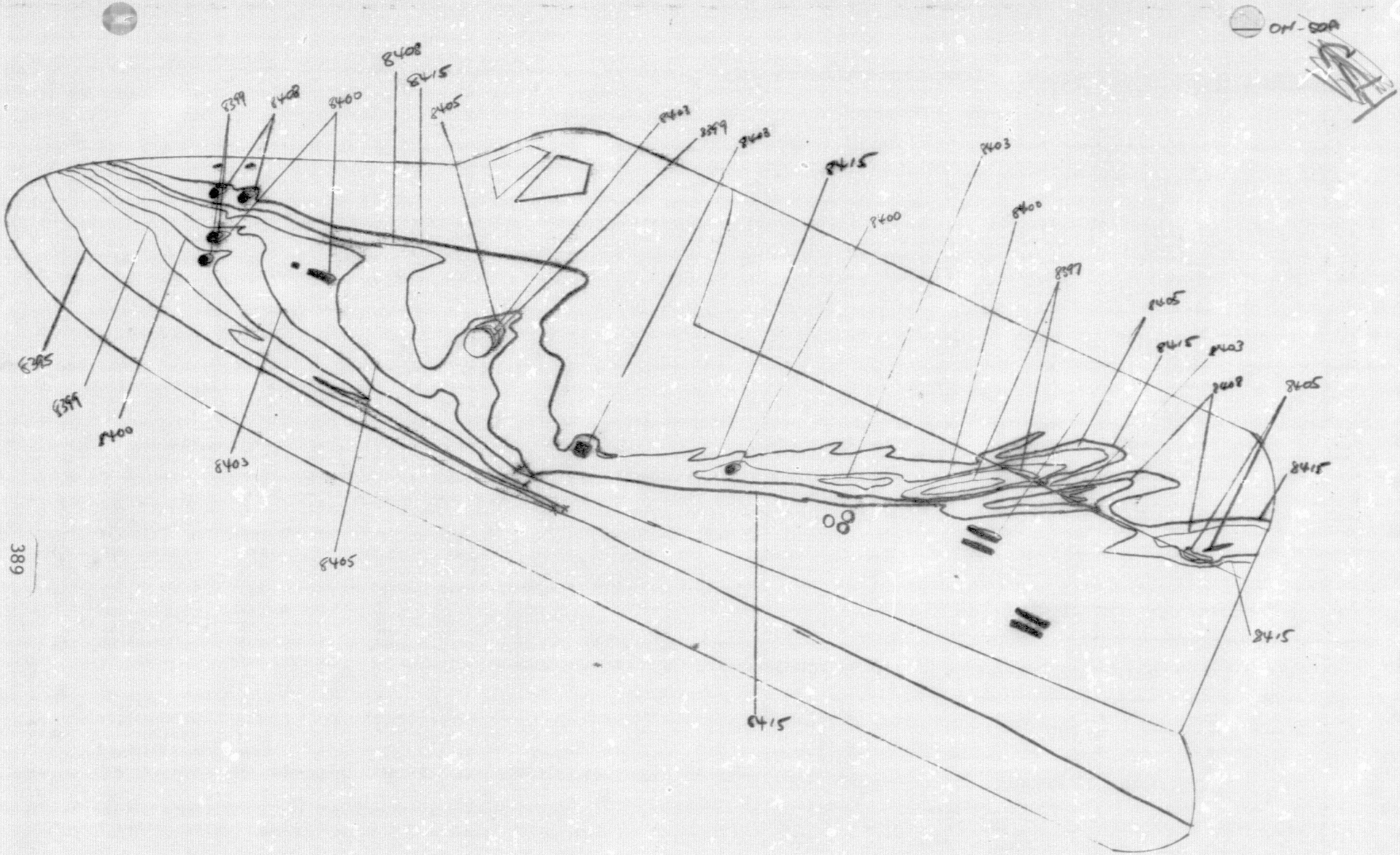
FRAME 1 - MODEL ON CENTERLINE



GROUP 30

$\alpha = 35$

$\psi = +1$



GROUP 30
$\alpha = 35$
$\psi = +1$

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

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NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
30	0	7.94	210.3	1282	34.99	-5.00	30.00	-1.74	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.023	.998	3776	2.015E-05	7.582E-08	1.004E 06	1.619E-02	2.682E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	76	.0486	0	0
OP SIDE(OS)	7801	113	76	.0486	0	0
BOTTOM(BOT)	8058	113	76	.0486	0	0
TOP(TOP)	8011	175	76	.0518	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TO 6792(175)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 1792(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
BO 3792(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 8392(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 6793(175)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 1793(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 3793(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 8393(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.75								
TOP 6794(175)	2.15	1.17	6.307E-03	.3893	7.815E-03	.4823	8.873E-03	.5476	1.032E-02
OS 1794(113)	2.18	1.19	2.037E-03	.1258	2.480E-03	.1531	2.783E-03	.1718	3.345E-03
BOT 3794(113)	2.18	1.19	2.037E-03	.1258	2.480E-03	.1531	2.783E-03	.1718	3.345E-03
NOS 8394(113)	2.18	1.19	2.037E-03	.1258	2.480E-03	.1531	2.783E-03	.1718	3.345E-03
TOP 6795(175)	3.25	2.27	4.526E-03	.2793	5.608E-03	.3461	6.367E-03	.3930	7.402E-03
OS 1795(113)	3.25	2.27	1.477E-03	.0912	1.799E-03	.1110	2.018E-03	.1246	2.425E-03
BOT 3795(113)	3.25	2.27	1.477E-03	.0912	1.799E-03	.1110	2.018E-03	.1246	2.425E-03
NOS 8395(113)	3.25	2.27	1.477E-03	.0912	1.799E-03	.1110	2.018E-03	.1246	2.425E-03
TOP 6796(175)	4.33	3.35	3.727E-03	.2301	4.619E-03	.2851	5.244E-03	.3237	6.096E-03
OS 1796(113)	4.33	3.35	1.217E-03	.0751	1.481E-03	.0914	1.662E-03	.1026	1.997E-03
BOT 3796(113)	4.33	3.35	1.217E-03	.0751	1.481E-03	.0914	1.662E-03	.1026	1.997E-03
NOS 8396(113)	4.33	3.35	1.217E-03	.0751	1.481E-03	.0914	1.662E-03	.1026	1.997E-03
TOP 6797(175)	5.43	4.45	3.233E-03	.1995	4.006E-03	.2472	4.549E-03	.2807	5.285E-03
OS 1797(113)	5.43	4.45	1.056E-03	.0651	1.285E-03	.0793	1.442E-03	.0890	1.731E-03
BOT 3797(113)	5.43	4.45	1.056E-03	.0651	1.285E-03	.0793	1.442E-03	.0890	1.731E-03
NOS 8397(113)	5.43	4.45	1.056E-03	.0651	1.285E-03	.0793	1.442E-03	.0890	1.731E-03
TOP 6798(175)	6.51	5.52	2.901E-03	.1790	3.595E-03	.2218	4.082E-03	.2518	4.740E-03
OS 1798(113)	6.51	5.52	9.472E-04	.0584	1.153E-03	.0711	1.294E-03	.0798	1.553E-03
BOT 3798(113)	6.51	5.52	9.472E-04	.0584	1.153E-03	.0711	1.294E-03	.0798	1.553E-03
NOS 8398(113)	6.51	5.52	9.472E-04	.0584	1.153E-03	.0711	1.294E-03	.0798	1.553E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PRESEND	ROLL-MODEL	YAW
30	0	7.94	210.8	1281	34.99	-5.00	30.00	-1.74	1.09

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.023	1.001	3775	2.021E-05	7.581E-08	1.006E 06	1.621E-02	2.678E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	YBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	76	.0486	4.963E-02	4.5805E-02
OP SIDE(OS)	7801	113	76	.0486	4.963E-02	4.5805E-02
BOTTOM(BOT)	8058	113	76	.0486	4.963E-02	4.5805E-02
TOP(TOP)	8011	175	76	.0518	1.328E-01	1.3164E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6799(175)	7.61	6.63	2.649E-03	.1635	3.282E-03	.2026	3.727E-03	.2300	4.333E-03
OS 1799(113)	7.61	6.63	8.649E-04	.0534	1.053E-03	.0650	1.181E-03	.0729	1.419E-03
BOT 3799(113)	7.61	6.63	8.649E-04	.0534	1.053E-03	.0650	1.181E-03	.0729	1.419E-03
NOS 8399(113)	7.61	6.63	8.649E-04	.0534	1.053E-03	.0650	1.181E-03	.0729	1.419E-03
TOP 6800(175)	8.68	7.70	2.457E-03	.1516	3.045E-03	.1878	3.457E-03	.2133	4.015E-03
OS 1800(113)	8.68	7.70	8.022E-04	.0495	9.765E-04	.0602	1.096E-03	.0676	1.315E-03
BOT 3800(113)	8.68	7.70	8.022E-04	.0495	9.765E-04	.0602	1.096E-03	.0676	1.315E-03
NOS 8400(113)	8.68	7.70	8.022E-04	.0495	9.765E-04	.0602	1.096E-03	.0676	1.315E-03
TOP 6801(175)	9.79	8.80	2.298E-03	.1418	2.848E-03	.1757	3.233E-03	.1995	3.757E-03
OS 1801(113)	9.79	8.80	7.503E-04	.0463	9.134E-04	.0564	1.025E-03	.0632	1.231E-03
BOT 3801(113)	9.79	8.80	7.503E-04	.0463	9.134E-04	.0564	1.025E-03	.0632	1.231E-03
NOS 8401(113)	9.79	8.80	7.503E-04	.0463	9.134E-04	.0564	1.025E-03	.0632	1.231E-03
TOP 6802(175)	10.86	9.88	2.169E-03	.1338	2.688E-03	.1658	3.052E-03	.1883	3.545E-03
OS 1802(113)	10.86	9.88	7.083E-04	.0437	8.622E-04	.0532	9.675E-04	.0597	1.161E-03
BOT 3802(113)	10.86	9.88	7.083E-04	.0437	8.622E-04	.0532	9.675E-04	.0597	1.161E-03
NOS 8402(113)	10.86	9.88	7.083E-04	.0437	8.622E-04	.0532	9.675E-04	.0597	1.161E-03
TOP 6803(175)	11.96	10.98	2.058E-03	.1269	2.550E-03	.1573	2.895E-03	.1786	3.361E-03
OS 1803(113)	11.96	10.98	6.718E-04	.0414	8.178E-04	.0504	9.177E-04	.0566	1.101E-03
BOT 3803(113)	11.96	10.98	6.718E-04	.0414	8.178E-04	.0504	9.177E-04	.0566	1.101E-03
NOS 8403(113)	11.96	10.98	6.718E-04	.0414	8.178E-04	.0504	9.177E-04	.0566	1.101E-03
TOP 6804(175)	13.04	12.06	1.964E-03	.1211	2.433E-03	.1501	2.763E-03	.1704	3.207E-03
OS 1804(113)	13.04	12.06	6.411E-04	.0395	7.805E-04	.0481	8.758E-04	.0540	1.051E-03
BOT 3804(113)	13.04	12.06	6.411E-04	.0395	7.805E-04	.0481	8.758E-04	.0540	1.051E-03
NOS 8404(113)	13.04	12.06	6.411E-04	.0395	7.805E-04	.0481	8.758E-04	.0540	1.051E-03
TOP 6805(175)	14.14	13.16	1.880E-03	.1159	2.329E-03	.1436	2.645E-03	.1631	3.069E-03
OS 1805(113)	14.14	13.16	6.137E-04	.0378	7.471E-04	.0461	8.383E-04	.0517	1.005E-03
BOT 3805(113)	14.14	13.16	6.137E-04	.0378	7.471E-04	.0461	8.383E-04	.0517	1.005E-03
NOS 8405(113)	14.14	13.16	6.137E-04	.0378	7.471E-04	.0461	8.383E-04	.0517	1.005E-03

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NASA-RI OH50
VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
30	8	7.94	211.0	1282	34.99	-5.00	30.00	-1.74	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.023	1.002	3776	2.022E-05	7.582E-08	1.007E 06	1.622E-02	2.677E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	76	.0486	4.963E-02	4.5805E-02
OP SIDE(OS)	7801	113	76	.0486	4.963E-02	4.5805E-02
BOTTOM(BOT)	8058	113	76	.0486	4.963E-02	4.5805E-02
TOP(TOP)	8011	175	76	.0518	1.328E-01	1.3164E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6806(175)	15.22	14.23	1.807E-03	.1115	2.239E-03	.1382	2.543E-03	.1569	2.953E-03
OS 1806(113)	15.22	14.23	5.900E-04	.0364	7.183E-04	.0443	8.060E-04	.0497	9.673E-04
BOT 3806(113)	15.22	14.23	5.900E-04	.0364	7.183E-04	.0443	8.060E-04	.0497	9.673E-04
NOS 8406(113)	15.22	14.23	5.900E-04	.0364	7.183E-04	.0443	8.060E-04	.0497	9.673E-04
TOP 6807(175)	16.32	15.34	1.741E-03	.1074	2.158E-03	.1331	2.450E-03	.1511	2.844E-03
OS 1807(113)	16.32	15.34	5.685E-04	.0351	6.920E-04	.0427	7.765E-04	.0479	9.315E-04
BOT 3807(113)	16.32	15.34	5.685E-04	.0351	6.920E-04	.0427	7.765E-04	.0479	9.315E-04
NOS 8407(113)	16.32	15.34	5.685E-04	.0351	6.920E-04	.0427	7.765E-04	.0479	9.315E-04
OS 1808(113)	17.40	16.41	5.495E-04	.0339	6.690E-04	.0412	7.506E-04	.0463	9.001E-04
BOT 3808(113)	17.40	16.41	5.495E-04	.0339	6.690E-04	.0412	7.506E-04	.0463	9.001E-04
NOS 8408(113)	17.40	16.41	5.495E-04	.0339	6.690E-04	.0412	7.506E-04	.0463	9.001E-04
TOP 6808(175)	17.42	16.44	1.682E-03	.1037	2.084E-03	.1285	2.366E-03	.1459	2.745E-03
TOP 6809(175)	18.50	17.51	1.629E-03	.1005	2.019E-03	.1245	2.292E-03	.1413	2.660E-03
OS 1809(113)	18.50	17.51	5.320E-04	.0328	6.476E-04	.0399	7.267E-04	.0448	8.713E-04
BOT 3809(113)	18.50	17.51	5.320E-04	.0328	6.476E-04	.0399	7.267E-04	.0448	8.713E-04
NOS 8409(113)	18.50	17.51	5.320E-04	.0328	6.476E-04	.0399	7.267E-04	.0448	8.713E-04
BOT 3810(113)	19.57	18.59	5.163E-04	.0318	6.286E-04	.0388	7.053E-04	.0435	8.457E-04
TOP 6810(175)	19.60	18.61	1.580E-03	.0975	1.958E-03	.1208	2.224E-03	.1371	2.580E-03
OS 1810(113)	19.60	18.61	5.160E-04	.0318	6.281E-04	.0387	7.048E-04	.0435	8.451E-04
NOS 8410(113)	19.60	18.61	5.160E-04	.0318	6.281E-04	.0387	7.048E-04	.0435	8.451E-04
TOP 6811(175)	20.67	19.69	1.537E-03	.0947	1.904E-03	.1174	2.162E-03	.1333	2.507E-03
OS 1811(113)	20.67	19.69	5.017E-04	.0309	6.107E-04	.0376	6.853E-04	.0422	8.213E-04
BOT 3811(113)	20.67	19.69	5.017E-04	.0309	6.107E-04	.0376	6.853E-04	.0422	8.213E-04
NOS 8411(113)	20.67	19.69	5.017E-04	.0309	6.107E-04	.0376	6.853E-04	.0422	8.213E-04
TOP 6812(175)	21.75	20.77	1.496E-03	.0923	1.854E-03	.1144	2.105E-03	.1299	2.445E-03
BOT 3812(113)	21.75	20.77	4.885E-04	.0301	5.947E-04	.0367	6.673E-04	.0412	8.009E-04

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NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
30	0	7.94	210.8	1281	34.99	-5.00	30.00	-1.74	1.09

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.023	1.001	3775	2.020E-05	7.581E-08	1.006E 06	1.621E-02	2.678E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	76	.0486	4.963E-02	4.5805E-02
OP SIDE(OS)	7E01	113	76	.0486	4.963E-02	4.5805E-02
BOTTOM(BOT)	8058	113	76	.0486	4.963E-02	4.5805E-02
TOP(TOP)	8011	175	76	.0518	1.328E-01	1.3164E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
OS 1812(113)	21.78	20.79	4.882E-04	.0301	5.943E-04	.0366	6.669E-04	.0411	7.996E-04
NOS 8412(113)	21.78	20.79	4.882E-04	.0301	5.943E-04	.0366	6.669E-04	.0411	7.996E-04
TOP 6813(175)	22.85	21.87	1.458E-03	.0899	1.807E-03	.1114	2.051E-03	.1265	2.380E-03
OS 1813(113)	22.85	21.87	4.760E-04	.0294	5.795E-04	.0357	6.503E-04	.0401	7.797E-04
BOT 3813(113)	22.85	21.87	4.760E-04	.0294	5.795E-04	.0357	6.503E-04	.0401	7.797E-04
NOS 8413(113)	22.85	21.87	4.760E-04	.0294	5.795E-04	.0357	6.503E-04	.0401	7.797E-04
BOT 3814(113)	23.93	22.94	4.647E-04	.0286	5.658E-04	.0349	6.349E-04	.0391	7.609E-04
TOP 6814(175)	23.95	22.97	1.423E-03	.0877	1.763E-03	.1087	2.002E-03	.1234	2.322E-03
OS 1814(113)	23.95	22.97	4.645E-04	.0286	5.655E-04	.0349	6.345E-04	.0391	7.608E-04
NOS 8414(113)	23.95	22.97	4.645E-04	.0286	5.655E-04	.0349	6.345E-04	.0391	7.608E-04
TOP 6815(175)	25.03	24.05	1.391E-03	.0857	1.723E-03	.1062	1.956E-03	.1206	2.269E-03
OS 1815(113)	25.03	24.05	4.540E-04	.0280	5.527E-04	.0341	6.201E-04	.0382	7.432E-04
BOT 3815(113)	25.03	24.05	4.540E-04	.0280	5.527E-04	.0341	6.201E-04	.0382	7.432E-04
NOS 8415(113)	25.03	24.05	4.540E-04	.0280	5.527E-04	.0341	6.201E-04	.0382	7.432E-04
BOT 3816(113)	26.11	25.12	4.441E-04	.0274	5.407E-04	.0333	6.067E-04	.0374	7.268E-04
TOP 6816(175)	26.13	25.15	1.360E-03	.0838	1.685E-03	.1039	1.913E-03	.1179	2.219E-03
OS 1816(113)	26.13	25.15	4.439E-04	.0274	5.404E-04	.0333	6.064E-04	.0374	7.267E-04
NOS 8416(113)	26.13	25.15	4.439E-04	.0274	5.404E-04	.0333	6.064E-04	.0374	7.267E-04
TOP 6817(175)	27.21	26.22	1.332E-03	.0821	1.650E-03	.1017	1.873E-03	.1155	2.173E-03
OS 1817(113)	27.21	26.22	4.347E-04	.0268	5.292E-04	.0326	5.938E-04	.0366	7.117E-04
BOT 3817(113)	27.21	26.22	4.347E-04	.0268	5.292E-04	.0326	5.938E-04	.0366	7.117E-04
NOS 8417(113)	27.21	26.22	4.347E-04	.0268	5.292E-04	.0326	5.938E-04	.0366	7.117E-04
TOP 6818(175)	28.31	27.32	1.304E-03	.0804	1.616E-03	.0996	1.835E-03	.1131	2.128E-03
OS 1818(113)	28.31	27.32	4.259E-04	.0263	5.184E-04	.0320	5.817E-04	.0359	6.972E-04
BOT 3818(113)	28.31	27.32	4.259E-04	.0263	5.184E-04	.0320	5.817E-04	.0359	6.972E-04
NOS 8418(113)	28.31	27.32	4.259E-04	.0263	5.184E-04	.0320	5.817E-04	.0359	6.972E-04

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NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

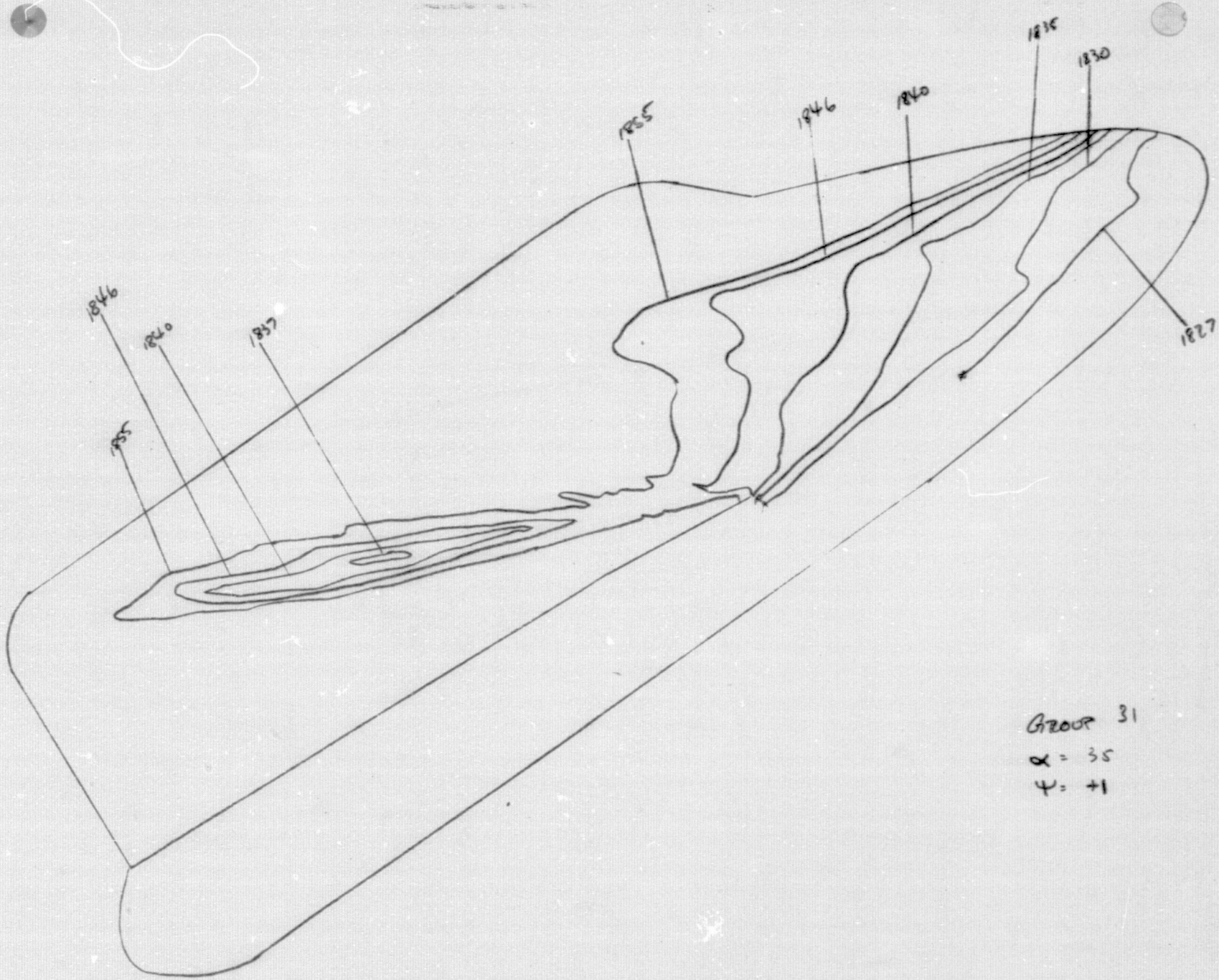
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
30	6	7.94	211.1	1282	34.99	-5.00	30.00	-1.74	1.88

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (Rx .04 FT)	STREF (Rx .04 FT)
94.2	.023	1.002	3776	2.023E-05	7.582E-09	1.008E 06	1.622E-02	2.677E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	76	.0486	4.963E-02	4.5805E-02
OP SIDE(OS)	7801	113	76	.0486	4.963E-02	4.5805E-02
BOTTOM(BOT)	8058	113	76	.0486	4.963E-02	4.5805E-02
TOP(TOP)	8011	175	76	.0518	1.328E-01	1.3164E-01

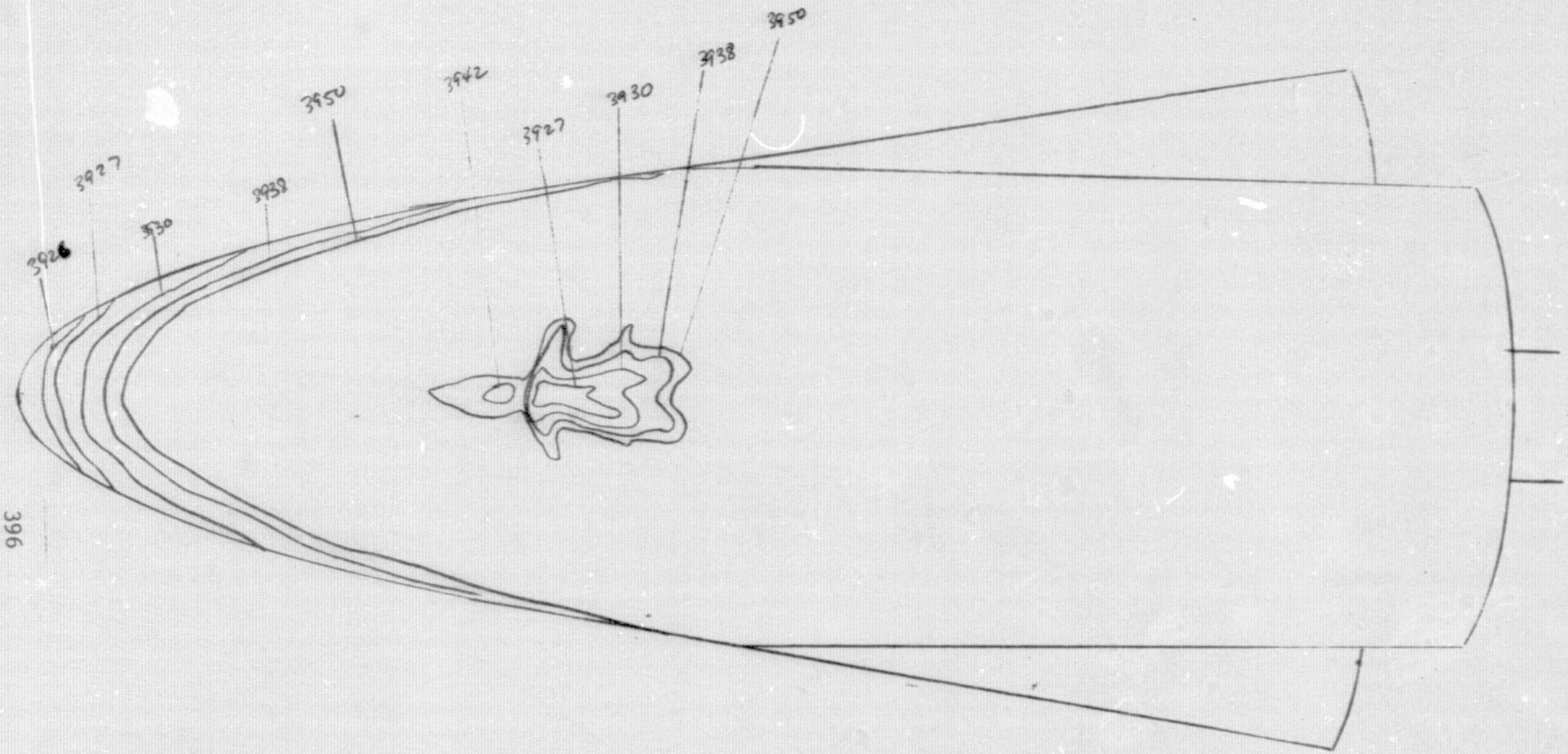
PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6819(175)	29.38	28.40	1.280E-03	.0789	1.585E-03	.0977	1.800E-03	.1110	2.088E-03
OS 1819(113)	29.38	28.40	4.177E-04	.0258	5.085E-04	.0313	5.706E-04	.0352	6.839E-04
BOT 3819(113)	29.38	28.40	4.177E-04	.0258	5.085E-04	.0313	5.706E-04	.0352	6.839E-04
NOS 8419(113)	29.38	28.40	4.177E-04	.0258	5.085E-04	.0313	5.706E-04	.0352	6.839E-04
TOP 6820(175)	30.49	29.50	1.255E-03	.0774	1.556E-03	.0959	1.766E-03	.1089	2.048E-03
OS 1820(113)	30.49	29.50	4.099E-04	.0253	4.989E-04	.0308	5.599E-04	.0345	6.710E-04
BOT 3820(113)	30.49	29.50	4.099E-04	.0253	4.989E-04	.0308	5.599E-04	.0345	6.710E-04
NOS 8420(113)	30.49	29.50	4.099E-04	.0253	4.989E-04	.0308	5.599E-04	.0345	6.710E-04
TOP 6821(175)	31.56	30.58	1.233E-03	.0760	1.528E-03	.0942	1.735E-03	.1069	2.012E-03
OS 1821(113)	31.56	30.58	4.026E-04	.0248	4.901E-04	.0302	5.499E-04	.0339	6.591E-04
BOT 3821(113)	31.56	30.58	4.026E-04	.0248	4.901E-04	.0302	5.499E-04	.0339	6.591E-04
NOS 8421(113)	31.56	30.58	4.026E-04	.0248	4.901E-04	.0302	5.499E-04	.0339	6.591E-04
TOP 6822(175)	32.66	31.68	1.211E-03	.0747	1.501E-03	.0925	1.704E-03	.1050	1.976E-03
OS 1822(113)	32.66	31.68	3.955E-04	.0244	4.815E-04	.0297	5.403E-04	.0333	6.472E-04
BOT 3822(113)	32.66	31.68	3.955E-04	.0244	4.815E-04	.0297	5.403E-04	.0333	6.472E-04
NOS 8422(113)	32.66	31.68	3.955E-04	.0244	4.815E-04	.0297	5.403E-04	.0333	6.472E-04
	33.06		MODEL HAS LEFT CENTERLINE						
OS 1823(113)	33.74	32.76	3.890E-04	.0240	4.735E-04	.0292	5.313E-04	.0328	6.368E-04
BOT 3823(113)	33.74	32.76	3.890E-04	.0240	4.735E-04	.0292	5.313E-04	.0328	6.368E-04
TOP 6823(175)	33.76	32.78	1.191E-03	.0734	1.476E-03	.0910	1.676E-03	.1033	1.944E-03
NOS 8423(113)	33.76	32.78	3.888E-04	.0240	4.733E-04	.0292	5.311E-04	.0328	6.368E-04

OH-50A



GROUP 31
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ψ = +1

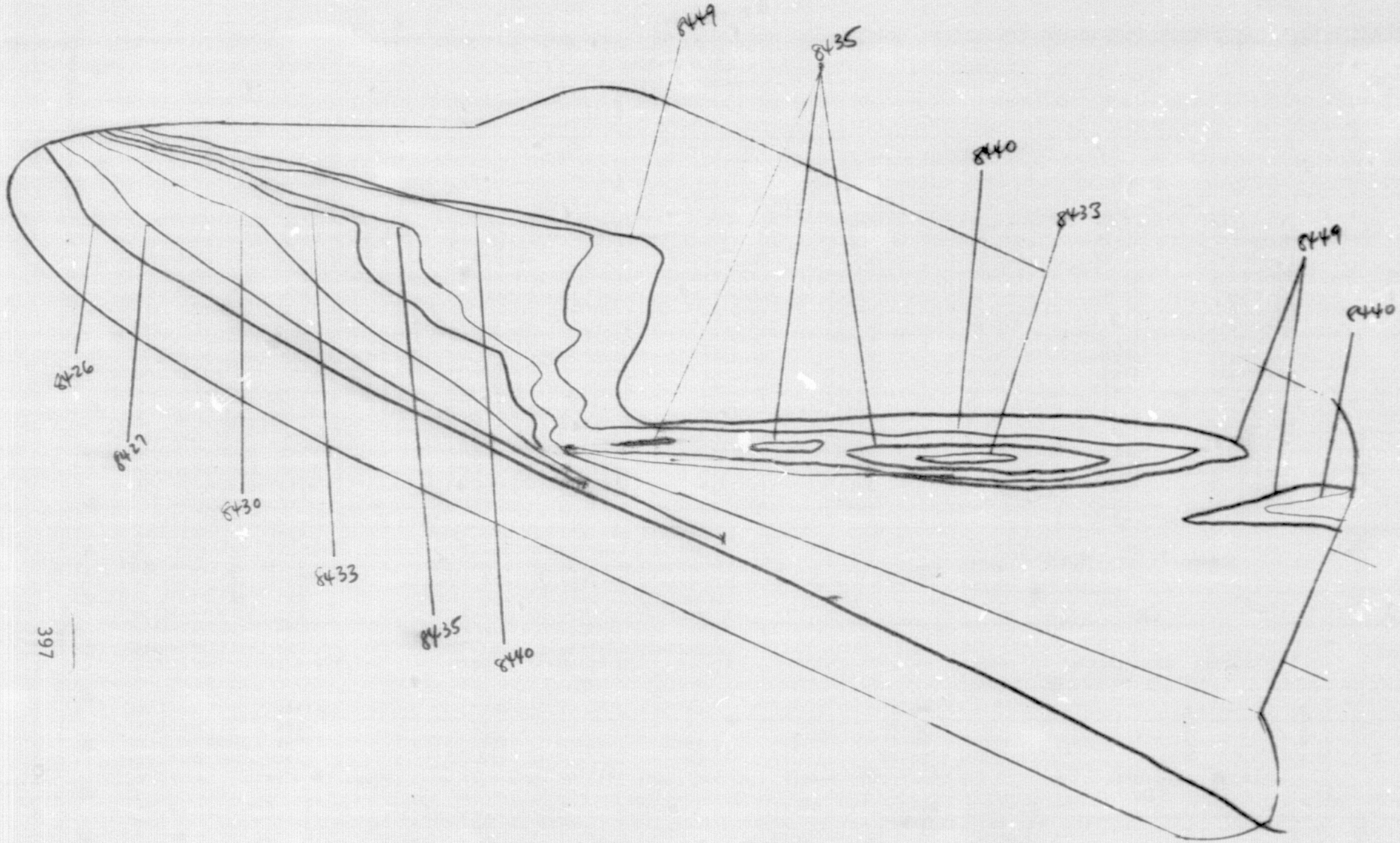
1-50A



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GROUP 31
$\alpha = 35$
$\psi = +1$

OH-50A



GROUP 31
$\alpha = 36$
$\psi = +1$

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NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
31	0	7.94	211.9	1282	34.99	-5.00	30.00	-1.74	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.023	1.006	3777	2.030E-05	7.586E-08	1.010E 06	1.625E-02	2.673E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	80	.0486	0	0
OP SIDE(OS)	7801	113	80	.0486	0	0
BOTTOM(BOT)	8058	113	80	.0486	0	0
TOP(TOP)	8011	113	80	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TO 6824(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 1824(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
BO 3924(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 8424(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 6825(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 1825(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 3925(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 8425(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.75								
TOP 6826(113)	2.18	1.19	1.816E-03	.1117	2.213E-03	.1362	2.483E-03	.1528	2.964E-03
OS 1826(113)	2.18	1.19	1.816E-03	.1117	2.213E-03	.1362	2.483E-03	.1528	2.964E-03
BOT 3926(113)	2.18	1.19	1.816E-03	.1117	2.213E-03	.1362	2.483E-03	.1528	2.964E-03
NOS 8426(113)	2.18	1.19	1.816E-03	.1117	2.213E-03	.1362	2.483E-03	.1528	2.964E-03
TOP 6827(113)	3.25	2.27	1.317E-03	.0810	1.605E-03	.0987	1.800E-03	.1107	2.147E-03
OS 1827(113)	3.25	2.27	1.317E-03	.0810	1.605E-03	.0987	1.800E-03	.1107	2.147E-03
BOT 3927(113)	3.25	2.27	1.317E-03	.0810	1.605E-03	.0987	1.800E-03	.1107	2.147E-03
NOS 8427(113)	3.25	2.27	1.317E-03	.0810	1.605E-03	.0987	1.800E-03	.1107	2.147E-03
BOT 3928(113)	4.33	3.35	1.085E-03	.0668	1.322E-03	.0814	1.483E-03	.0913	1.772E-03
TOP 6828(113)	4.36	3.37	1.081E-03	.0665	1.317E-03	.0810	1.477E-03	.0909	1.764E-03
OS 1828(113)	4.36	3.37	1.081E-03	.0665	1.317E-03	.0810	1.477E-03	.0909	1.764E-03
NOS 8428(113)	4.36	3.37	1.081E-03	.0665	1.317E-03	.0810	1.477E-03	.0909	1.764E-03
TOP 6829(113)	5.43	4.45	9.408E-04	.0579	1.147E-03	.0706	1.286E-03	.0792	1.536E-03
OS 1829(113)	5.43	4.45	9.408E-04	.0579	1.147E-03	.0706	1.286E-03	.0792	1.536E-03
BOT 3929(113)	5.43	4.45	9.408E-04	.0579	1.147E-03	.0706	1.286E-03	.0792	1.536E-03
NOS 8429(113)	5.43	4.45	9.408E-04	.0579	1.147E-03	.0706	1.286E-03	.0792	1.536E-03
OS 1830(113)	6.51	5.52	8.442E-04	.0520	1.029E-03	.0633	1.154E-03	.0710	1.379E-03
BOT 3930(113)	6.51	5.52	8.442E-04	.0520	1.029E-03	.0633	1.154E-03	.0710	1.379E-03

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NASA-RI OH58
VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
31	0	7.96	211.7	1282	34.99	-5.00	30.00	-1.74	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.023	1.005	3777	2.028E-05	7.586E-08	1.009E 06	1.625E-02	2.674E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7E23	113	80	.0486	4.445E-02	4.0827E-02
OP SIDE(OS)	7E01	113	80	.0486	4.445E-02	4.0827E-02
BOTTOM(BOT)	8058	113	80	.0486	4.445E-02	4.0827E-02
TOP(TOP)	8011	113	80	.0486	4.445E-02	4.0827E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6830(113)	6.53	5.55	8.423E-04	.0518	1.026E-03	.0632	1.152E-03	.0709	1.375E-03
NOS 8430(113)	6.53	5.55	8.423E-04	.0518	1.026E-03	.0632	1.152E-03	.0709	1.375E-03
TOP 6831(113)	7.61	6.63	7.709E-04	.0475	9.394E-04	.0578	1.054E-03	.0649	1.259E-03
OS 1831(113)	7.61	6.63	7.709E-04	.0475	9.394E-04	.0578	1.054E-03	.0649	1.259E-03
BOT 3931(113)	7.61	6.63	7.709E-04	.0475	9.394E-04	.0578	1.054E-03	.0649	1.259E-03
NOS 8431(113)	7.61	6.63	7.709E-04	.0475	9.394E-04	.0578	1.054E-03	.0649	1.259E-03
TOP 6832(113)	8.68	7.70	7.150E-04	.0440	8.713E-04	.0536	9.775E-04	.0602	1.167E-03
OS 1832(113)	8.68	7.70	7.150E-04	.0440	8.713E-04	.0536	9.775E-04	.0602	1.167E-03
BOT 3932(113)	8.68	7.70	7.150E-04	.0440	8.713E-04	.0536	9.775E-04	.0602	1.167E-03
NOS 8432(113)	8.68	7.70	7.150E-04	.0440	8.713E-04	.0536	9.775E-04	.0602	1.167E-03
TOP 6833(113)	9.79	8.80	6.688E-04	.0412	8.150E-04	.0502	9.143E-04	.0563	1.093E-03
OS 1833(113)	9.79	8.80	6.688E-04	.0412	8.150E-04	.0502	9.143E-04	.0563	1.093E-03
BOT 3933(113)	9.79	8.80	6.688E-04	.0412	8.150E-04	.0502	9.143E-04	.0563	1.093E-03
NOS 8433(113)	9.79	8.80	6.688E-04	.0412	8.150E-04	.0502	9.143E-04	.0563	1.093E-03
TOP 6834(113)	10.86	9.88	6.313E-04	.0389	7.693E-04	.0474	8.631E-04	.0532	1.032E-03
OS 1834(113)	10.86	9.88	6.313E-04	.0389	7.693E-04	.0474	8.631E-04	.0532	1.032E-03
BOT 3934(113)	10.86	9.88	6.313E-04	.0389	7.693E-04	.0474	8.631E-04	.0532	1.032E-03
NOS 8434(113)	10.86	9.88	6.313E-04	.0389	7.693E-04	.0474	8.631E-04	.0532	1.032E-03
TOP 6835(113)	11.94	10.96	5.995E-04	.0369	7.305E-04	.0450	8.196E-04	.0505	9.793E-04
OS 1835(113)	11.96	10.98	5.988E-04	.0369	7.297E-04	.0449	8.187E-04	.0504	9.786E-04
BOT 3935(113)	11.96	10.98	5.988E-04	.0369	7.297E-04	.0449	8.187E-04	.0504	9.786E-04
NOS 8435(113)	11.96	10.98	5.988E-04	.0369	7.297E-04	.0449	8.187E-04	.0504	9.786E-04
TOP 6836(113)	13.04	12.06	5.714E-04	.0352	6.964E-04	.0429	7.813E-04	.0481	9.336E-04
OS 1836(113)	13.04	12.06	5.714E-04	.0352	6.964E-04	.0429	7.813E-04	.0481	9.336E-04
BOT 3936(113)	13.04	12.06	5.714E-04	.0352	6.964E-04	.0429	7.813E-04	.0481	9.336E-04
NOS 8436(113)	13.04	12.06	5.714E-04	.0352	6.964E-04	.0429	7.813E-04	.0481	9.336E-04

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NASA-RI OH50

VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
31	0	7.94	211.6	1282	34.99	-5.00	30.00	-1.74	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.023	1.005	3777	2.027E-05	7.586E-08	1.009E 06	1.624E-02	2.674E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	80	.0486	4.445E-02	4.0827E-02
OP SIDE(OS)	7801	113	80	.0486	4.445E-02	4.0827E-02
BOTTOM(BOT)	8058	113	80	.0486	4.445E-02	4.0827E-02
TOP(TOP)	8011	113	80	.0486	4.445E-02	4.0827E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
BOT 3937(113)	14.12	13.13	5.475E-04	.0337	6.672E-04	.0411	7.486E-04	.0461	8.949E-04
TOP 6837(113)	14.14	13.16	5.470E-04	.0337	6.666E-04	.0411	7.479E-04	.0461	8.940E-04
OS 1837(113)	14.14	13.16	5.470E-04	.0337	6.666E-04	.0411	7.479E-04	.0461	8.940E-04
NOS 8437(113)	14.14	13.16	5.470E-04	.0337	6.666E-04	.0411	7.479E-04	.0461	8.940E-04
TOP 6838(113)	15.22	14.23	5.259E-04	.0324	6.409E-04	.0395	7.190E-04	.0443	8.600E-04
OS 1838(113)	15.22	14.23	5.259E-04	.0324	6.409E-04	.0395	7.190E-04	.0443	8.600E-04
BOT 3938(113)	15.22	14.23	5.259E-04	.0324	6.409E-04	.0395	7.190E-04	.0443	8.600E-04
NOS 8438(113)	15.22	14.23	5.259E-04	.0324	6.409E-04	.0395	7.190E-04	.0443	8.600E-04
BOT 3939(113)	16.29	15.31	5.071E-04	.0312	6.180E-04	.0381	6.933E-04	.0427	8.292E-04
TOP 6839(113)	16.32	15.34	5.067E-04	.0312	6.175E-04	.0380	6.927E-04	.0427	8.281E-04
OS 1839(113)	16.32	15.34	5.067E-04	.0312	6.175E-04	.0380	6.927E-04	.0427	8.281E-04
NOS 8439(113)	16.32	15.34	5.067E-04	.0312	6.175E-04	.0380	6.927E-04	.0427	8.281E-04
TOP 6840(113)	17.40	16.41	4.898E-04	.0302	5.969E-04	.0368	6.696E-04	.0412	8.009E-04
OS 1840(113)	17.40	16.41	4.898E-04	.0302	5.969E-04	.0368	6.696E-04	.0412	8.009E-04
BOT 3940(113)	17.40	16.41	4.898E-04	.0302	5.969E-04	.0368	6.696E-04	.0412	8.009E-04
NOS 8440(113)	17.40	16.41	4.898E-04	.0302	5.969E-04	.0368	6.696E-04	.0412	8.009E-04
BOT 3941(113)	18.47	17.49	4.745E-04	.0292	5.782E-04	.0356	6.487E-04	.0399	7.755E-04
TOP 6841(113)	18.50	17.51	4.741E-04	.0292	5.778E-04	.0356	6.482E-04	.0399	7.756E-04
OS 1841(113)	18.50	17.51	4.741E-04	.0292	5.778E-04	.0356	6.482E-04	.0399	7.756E-04
NOS 8441(113)	18.50	17.51	4.741E-04	.0292	5.778E-04	.0356	6.482E-04	.0399	7.756E-04
TOP 6842(113)	19.57	18.59	4.602E-04	.0283	5.608E-04	.0345	6.292E-04	.0388	7.525E-04
OS 1842(113)	19.57	18.59	4.602E-04	.0283	5.608E-04	.0345	6.292E-04	.0388	7.525E-04
BOT 3942(113)	19.57	18.59	4.602E-04	.0283	5.608E-04	.0345	6.292E-04	.0388	7.525E-04
NOS 8442(113)	19.57	18.59	4.602E-04	.0283	5.608E-04	.0345	6.292E-04	.0388	7.525E-04
BOT 3943(113)	20.65	19.67	4.474E-04	.0276	5.453E-04	.0336	6.117E-04	.0377	7.323E-04

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NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
31	8	7.94	211.2	1282	34.99	-5.00	30.00	-1.74	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.023	1.003	3776	2.023E-05	7.585E-08	1.007E 06	1.623E-02	2.677E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	80	.0486	4.445E-02	4.0827E-02
OP SIDE(OS)	7801	113	80	.0486	4.445E-02	4.0827E-02
BOTTOM(BOT)	8058	113	80	.0485	4.445E-02	4.0827E-02
TOP(TOP)	8011	113	80	.0486	4.445E-02	4.0827E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6843(113)	20.67	19.69	4.472E-04	.0276	5.449E-04	.0336	6.114E-04	.0377	7.319E-04
OS 1843(113)	20.67	19.69	4.472E-04	.0276	5.449E-04	.0336	6.114E-04	.0377	7.319E-04
NOS 8443(113)	20.67	19.69	4.472E-04	.0276	5.449E-04	.0336	6.114E-04	.0377	7.319E-04
TOP 6844(113)	21.75	20.77	4.354E-04	.0268	5.305E-04	.0327	5.953E-04	.0367	7.120E-04
OS 1844(113)	21.75	20.77	4.354E-04	.0268	5.306E-04	.0327	5.953E-04	.0367	7.120E-04
BOT 3944(113)	21.75	20.77	4.354E-04	.0268	5.306E-04	.0327	5.953E-04	.0367	7.120E-04
NOS 8444(113)	21.75	20.77	4.354E-04	.0268	5.306E-04	.0327	5.953E-04	.0367	7.120E-04
OS 1845(113)	22.83	21.84	4.245E-04	.0262	5.174E-04	.0319	5.804E-04	.0358	6.945E-04
BOT 3945(113)	22.83	21.84	4.245E-04	.0262	5.174E-04	.0319	5.804E-04	.0358	6.945E-04
NOS 8445(113)	22.83	21.84	4.245E-04	.0262	5.174E-04	.0319	5.804E-04	.0358	6.945E-04
TOP 6845(113)	22.85	21.87	4.243E-04	.0261	5.171E-04	.0319	5.801E-04	.0357	6.938E-04
TOP 6846(113)	23.93	22.94	4.142E-04	.0255	5.048E-04	.0311	5.663E-04	.0349	6.777E-04
OS 1846(113)	23.93	22.94	4.142E-04	.0255	5.048E-04	.0311	5.663E-04	.0349	6.777E-04
BOT 3946(113)	23.93	22.94	4.142E-04	.0255	5.048E-04	.0311	5.663E-04	.0349	6.777E-04
NOS 8446(113)	23.93	22.94	4.142E-04	.0255	5.048E-04	.0311	5.663E-04	.0349	6.777E-04
TOP 6847(113)	25.00	24.02	4.048E-04	.0249	4.934E-04	.0304	5.535E-04	.0341	6.617E-04
OS 1847(113)	25.00	24.02	4.048E-04	.0249	4.934E-04	.0304	5.535E-04	.0341	6.617E-04
BOT 3947(113)	25.00	24.02	4.048E-04	.0249	4.934E-04	.0304	5.535E-04	.0341	6.617E-04
NOS 8447(113)	25.00	24.02	4.048E-04	.0249	4.934E-04	.0304	5.535E-04	.0341	6.617E-04
TOP 6848(113)	26.11	25.12	3.959E-04	.0244	4.824E-04	.0297	5.412E-04	.0333	6.477E-04
OS 1848(113)	26.11	25.12	3.959E-04	.0244	4.824E-04	.0297	5.412E-04	.0333	6.477E-04
BOT 3948(113)	26.11	25.12	3.959E-04	.0244	4.824E-04	.0297	5.412E-04	.0333	6.477E-04
NOS 8448(113)	26.11	25.12	3.959E-04	.0244	4.824E-04	.0297	5.412E-04	.0333	6.477E-04
TOP 6849(113)	27.18	26.20	3.877E-04	.0239	4.724E-04	.0291	5.300E-04	.0327	6.342E-04
BOT 3949(113)	27.18	26.20	3.877E-04	.0239	4.724E-04	.0291	5.300E-04	.0327	6.342E-04
NOS 8449(113)	27.18	26.20	3.877E-04	.0239	4.724E-04	.0291	5.300E-04	.0327	6.342E-04

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NASA-RI ONSO

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
31	0	7.94	211.3	1282	34.99	-5.00	30.00	-1.74	1.88

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.023	1.003	3776	2.024E-05	7.585E-08	1.008E 06	1.623E-02	2.676E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	80	.0486	4.445E-02	4.0827E-02
OP SIDE(OS)	7801	113	80	.0486	4.445E-02	4.0827E-02
BOTTOM(BOT)	8058	113	80	.0486	4.445E-02	4.0827E-02
TOP(TOP)	8011	113	80	.0486	4.445E-02	4.0827E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
OS 1849(113)	27.21	26.22	3.875E-04	.0239	4.722E-04	.0291	5.298E-04	.0326	6.339E-04
BOT 3950(113)	28.26	27.27	3.799E-04	.0234	4.630E-04	.0285	5.194E-04	.0320	6.216E-04
TOP 6850(113)	28.28	27.30	3.798E-04	.0234	4.628E-04	.0285	5.192E-04	.0320	6.212E-04
OS 1850(113)	28.28	27.30	3.798E-04	.0234	4.628E-04	.0285	5.192E-04	.0320	6.212E-04
NOS 8450(113)	28.28	27.30	3.798E-04	.0234	4.628E-04	.0285	5.192E-04	.0320	6.212E-04
TOP 6851(113)	29.36	28.38	3.725E-04	.0230	4.539E-04	.0280	5.093E-04	.0314	6.097E-04
OS 1851(113)	29.36	28.38	3.725E-04	.0230	4.539E-04	.0280	5.093E-04	.0314	6.097E-04
BOT 3951(113)	29.36	28.38	3.725E-04	.0230	4.539E-04	.0280	5.093E-04	.0314	6.097E-04
NOS 8451(113)	29.36	28.38	3.725E-04	.0230	4.539E-04	.0280	5.093E-04	.0314	6.097E-04
BOT 3952(113)	30.44	29.45	3.656E-04	.0225	4.456E-04	.0275	4.999E-04	.0308	5.990E-04
TOP 6852(113)	30.46	29.48	3.655E-04	.0225	4.454E-04	.0275	4.997E-04	.0308	5.990E-04
OS 1852(113)	30.46	29.48	3.655E-04	.0225	4.454E-04	.0275	4.997E-04	.0308	5.990E-04
NOS 8452(113)	30.46	29.48	3.655E-04	.0225	4.454E-04	.0275	4.997E-04	.0308	5.990E-04
TOP 6853(113)	31.54	30.55	3.590E-04	.0221	4.375E-04	.0270	4.908E-04	.0302	5.873E-04
OS 1853(113)	31.54	30.55	3.590E-04	.0221	4.375E-04	.0270	4.908E-04	.0302	5.873E-04
BOT 3953(113)	31.54	30.55	3.590E-04	.0221	4.375E-04	.0270	4.908E-04	.0302	5.873E-04
NOS 8453(113)	31.54	30.55	3.528E-04	.0217	4.299E-04	.0265	4.824E-04	.0297	5.776E-04
TOP 6854(113)	32.61	31.63	3.528E-04	.0217	4.299E-04	.0265	4.824E-04	.0297	5.776E-04
OS 1854(113)	32.61	31.63	3.528E-04	.0217	4.299E-04	.0265	4.824E-04	.0297	5.776E-04
BOT 3954(113)	32.61	31.63	3.527E-04	.0217	4.298E-04	.0265	4.822E-04	.0297	5.767E-04
NOS 8454(113)	32.64	31.65	3.468E-04	.0214	4.227E-04	.0260	4.742E-04	.0292	5.674E-04
TOP 6855(113)	33.71	32.73	3.468E-04	.0214	4.227E-04	.0260	4.742E-04	.0292	5.674E-04
OS 1855(113)	33.71	32.73	3.468E-04	.0214	4.227E-04	.0260	4.742E-04	.0292	5.674E-04
BOT 3955(113)	33.71	32.73	3.468E-04	.0214	4.227E-04	.0260	4.742E-04	.0292	5.674E-04
NOS 8455(113)	33.71	32.73							

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NASA-RI OH50
VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
31	6	7.94	211.3	1282	34.99	-5.00	30.00	-1.74	1.00

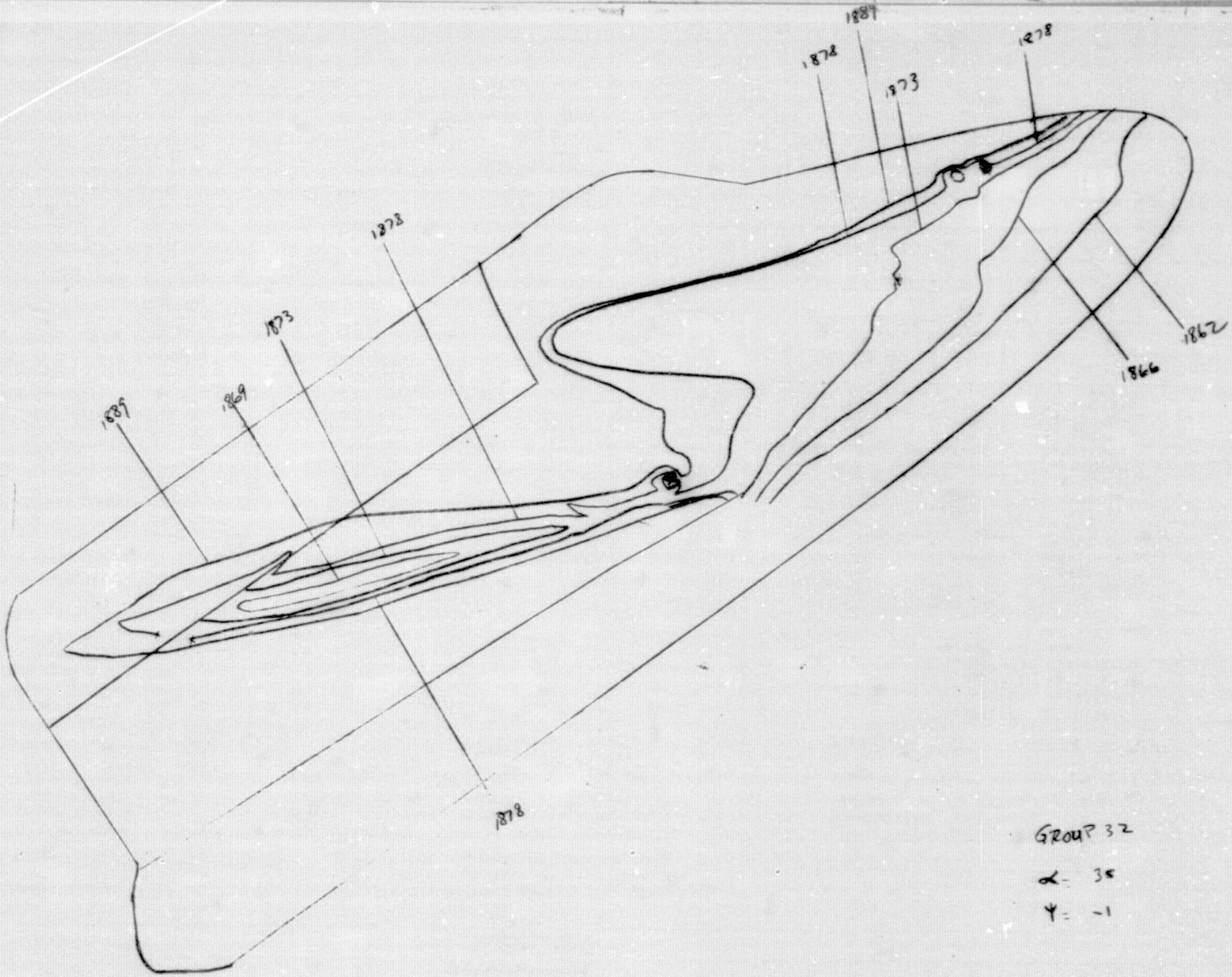
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.023	1.003	3776	2.024E-05	7.585E-08	1.008E 06	1.623E-02	2.676E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	80	.0486	4.445E-02	4.0827E-02
OP SIDE(OS)	7801	113	80	.0486	4.445E-02	4.0827E-02
BOTTOM(BOT)	8058	113	80	.0486	4.445E-02	4.0827E-02
TOP(TOP)	8011	113	80	.0486	4.445E-02	4.0827E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6856(113)	34.79	33.81	3.413E-04	.0210	4.159E-04	.0256	4.666E-04	.0288	5.591E-04
OS 1856(113)	34.79	33.81	3.413E-04	.0210	4.159E-04	.0256	4.666E-04	.0288	5.591E-04
BOT 3956(113)	34.79	33.81	3.413E-04	.0210	4.159E-04	.0256	4.666E-04	.0288	5.591E-04
NOS 8456(113)	34.79	33.81	3.413E-04	.0210	4.159E-04	.0256	4.666E-04	.0288	5.591E-04
	34.82		MODEL HAS LEFT CENTERLINE						
TOP 6857(113)	35.89	34.91	3.358E-04	.0207	4.093E-04	.0252	4.591E-04	.0283	5.499E-04
OS 1857(113)	35.89	34.91	3.358E-04	.0207	4.093E-04	.0252	4.591E-04	.0283	5.499E-04
BOT 3957(113)	35.89	34.91	3.358E-04	.0207	4.093E-04	.0252	4.591E-04	.0283	5.499E-04
NOS 8457(113)	35.89	34.91	3.358E-04	.0207	4.093E-04	.0252	4.591E-04	.0283	5.499E-04
TOP 6858(113)	36.97	35.98	3.308E-04	.0204	4.031E-04	.0248	4.522E-04	.0279	5.416E-04
OS 1858(113)	36.97	35.98	3.308E-04	.0204	4.031E-04	.0248	4.522E-04	.0279	5.416E-04
BOT 3958(113)	36.97	35.98	3.308E-04	.0204	4.031E-04	.0248	4.522E-04	.0279	5.416E-04
NOS 8458(113)	36.97	35.98	3.308E-04	.0204	4.031E-04	.0248	4.522E-04	.0279	5.416E-04

403

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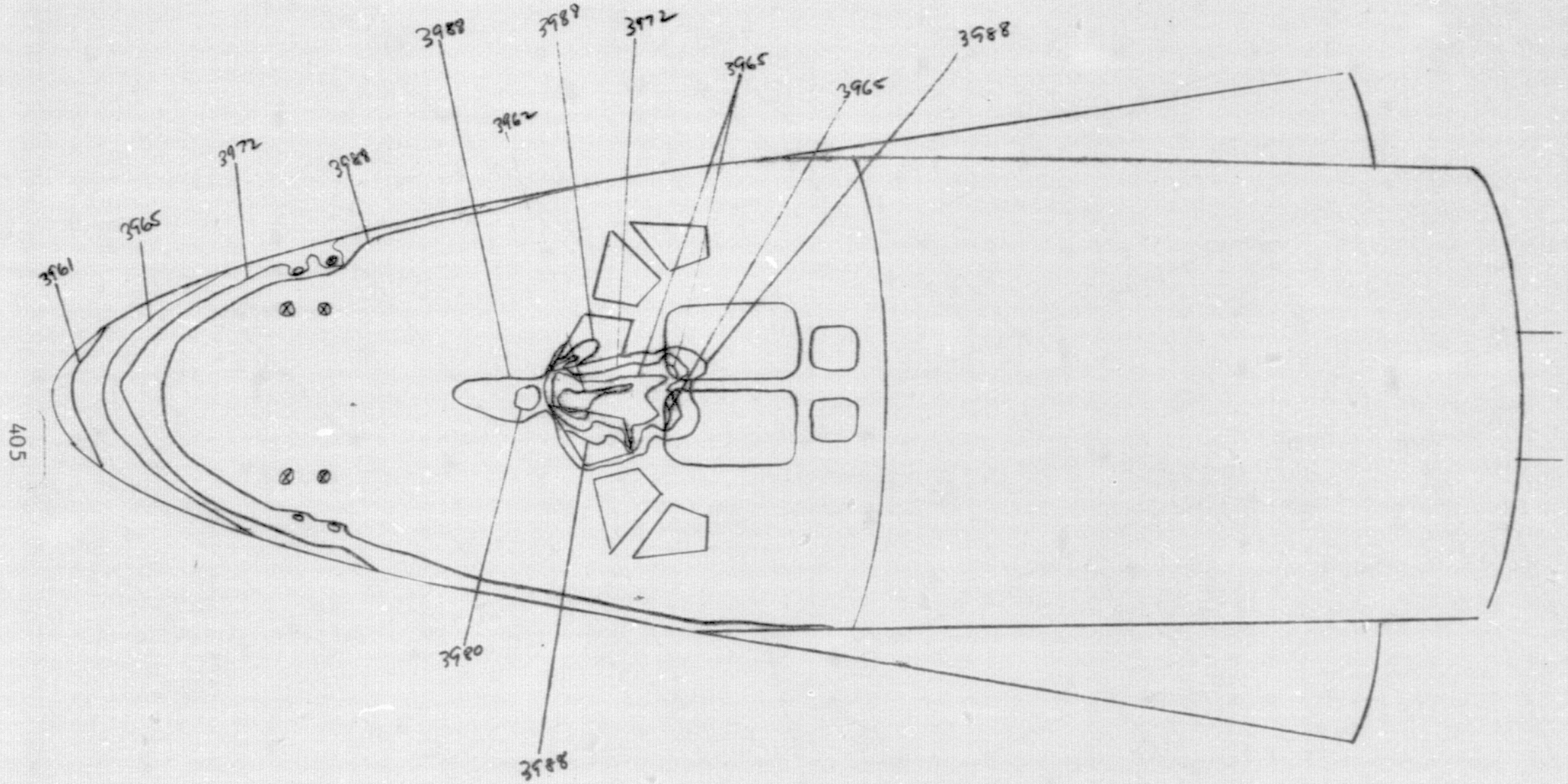


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GROUP 32

$\alpha = 35$

$\Psi = -1$



GROUP 32

α = 35

ψ = -1

OH-58A

GROUP 32
$\alpha = 35$
$\psi = -1$

406

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

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4/10/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
32	0	7.94	209.1	1281	34.99	-5.00	30.00	1.74	-1.08

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.022	.993	3775	2.005E-05	7.578E-08	9.987E 05	1.614E-02	2.689E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7E23	113	80	.0486	0	0
OP SIDE(OS)	7801	113	80	.0486	0	0
BOTTOM(BOT)	8058	113	80	.0486	0	0
TOP(TOP)	8011	113	80	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
OS 1859(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
BO 3959(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 6859(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 8459(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 6860(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 1860(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 3960(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 8460(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =		1.85							
TOP 6861(113)	2.18	1.14	1.863E-03	.1153	2.272E-03	.1407	2.549E-03	.1578	3.075E-03
OS 1861(113)	2.18	1.14	1.863E-03	.1153	2.272E-03	.1407	2.549E-03	.1578	3.075E-03
BOT 3961(113)	2.18	1.14	1.863E-03	.1153	2.272E-03	.1407	2.549E-03	.1578	3.075E-03
NOS 8461(113)	2.18	1.14	1.863E-03	.1153	2.272E-03	.1407	2.549E-03	.1578	3.075E-03
BOT 3962(113)	3.25	2.21	1.335E-03	.0827	1.629E-03	.1008	1.827E-03	.1131	2.204E-03
TOP 6862(113)	3.28	2.24	1.328E-03	.0822	1.620E-03	.1003	1.817E-03	.1125	2.191E-03
OS 1862(113)	3.28	2.24	1.328E-03	.0822	1.620E-03	.1003	1.817E-03	.1125	2.191E-03
NOS 8462(113)	3.28	2.24	1.328E-03	.0822	1.620E-03	.1003	1.817E-03	.1125	2.191E-03
TOP 6863(113)	4.36	3.32	1.091E-03	.0675	1.331E-03	.0824	1.493E-03	.0924	1.801E-03
OS 1863(113)	4.36	3.32	1.091E-03	.0675	1.331E-03	.0824	1.493E-03	.0924	1.801E-03
BOT 3963(113)	4.36	3.32	1.091E-03	.0675	1.331E-03	.0824	1.493E-03	.0924	1.801E-03
NOS 8463(113)	4.36	3.32	1.091E-03	.0675	1.331E-03	.0824	1.493E-03	.0924	1.801E-03
TOP 6864(113)	5.43	4.39	9.482E-04	.0587	1.157E-03	.0716	1.297E-03	.0803	1.565E-03
BOT 3964(113)	5.43	4.39	9.482E-04	.0587	1.157E-03	.0716	1.297E-03	.0803	1.565E-03
NOS 8464(113)	5.43	4.39	9.482E-04	.0587	1.157E-03	.0716	1.297E-03	.0803	1.565E-03
OS 1864(113)	5.46	4.42	9.455E-04	.0585	1.153E-03	.0714	1.293E-03	.0801	1.560E-03
BOT 3965(113)	6.51	5.47	8.497E-04	.0526	1.036E-03	.0641	1.163E-03	.0719	1.401E-03

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4/10/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
32	0	7.94	209.5	1281	34.99	-5.00	30.00	1.74	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.023	.995	3775	2.009E-05	7.578E-08	1.001E 06	1.616E-02	2.686E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	80	.0486	4.454E-02	4.0884E-02
OP SIDE(OS)	7801	113	80	.0486	4.454E-02	4.0884E-02
BOTTOM(BOT)	8058	113	80	.0486	4.454E-02	4.0884E-02
TOP(TOP)	8011	113	80	.0486	4.454E-02	4.0884E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6865(113)	6.53	5.49	8.478E-04	.0525	1.034E-03	.0640	1.160E-03	.0718	1.398E-03
OS 1865(113)	6.53	5.49	8.478E-04	.0525	1.034E-03	.0640	1.160E-03	.0718	1.398E-03
NOS 8465(113)	6.53	5.49	8.478E-04	.0525	1.034E-03	.0640	1.160E-03	.0718	1.398E-03
TOP 6866(113)	7.61	6.57	7.752E-04	.0480	9.456E-04	.0585	1.061E-03	.0656	1.278E-03
OS 1866(113)	7.61	6.57	7.752E-04	.0480	9.456E-04	.0585	1.061E-03	.0656	1.278E-03
BOT 3966(113)	7.61	6.57	7.752E-04	.0480	9.456E-04	.0585	1.061E-03	.0656	1.278E-03
NOS 8466(113)	7.61	6.57	7.752E-04	.0480	9.456E-04	.0585	1.061E-03	.0656	1.278E-03
BOT 3967(113)	8.68	7.65	7.186E-04	.0445	8.765E-04	.0543	9.831E-04	.0609	1.186E-03
TOP 6867(113)	8.71	7.67	7.174E-04	.0444	8.751E-04	.0542	9.815E-04	.0608	1.186E-03
OS 1867(113)	8.71	7.67	7.174E-04	.0444	8.751E-04	.0542	9.815E-04	.0608	1.186E-03
NOS 8467(113)	8.71	7.67	7.174E-04	.0444	8.751E-04	.0542	9.815E-04	.0608	1.186E-03
TOP 6868(113)	9.79	8.75	6.719E-04	.0416	8.195E-04	.0507	9.192E-04	.0569	1.107E-03
OS 1868(113)	9.79	8.75	6.719E-04	.0416	8.195E-04	.0507	9.192E-04	.0569	1.107E-03
BOT 3968(113)	9.79	8.75	6.719E-04	.0416	8.195E-04	.0507	9.192E-04	.0569	1.107E-03
NOS 8468(113)	9.79	8.75	6.719E-04	.0416	8.195E-04	.0507	9.192E-04	.0569	1.107E-03
TOP 6869(113)	10.86	9.82	6.340E-04	.0392	7.733E-04	.0478	8.673E-04	.0537	1.045E-03
OS 1869(113)	10.86	9.82	6.340E-04	.0392	7.733E-04	.0478	8.673E-04	.0537	1.045E-03
BOT 3969(113)	10.86	9.82	6.340E-04	.0392	7.733E-04	.0478	8.673E-04	.0537	1.045E-03
NOS 8469(113)	10.89	9.85	6.332E-04	.0392	7.723E-04	.0478	8.662E-04	.0536	1.043E-03
TOP 6870(113)	11.96	10.92	6.012E-04	.0372	7.333E-04	.0454	8.225E-04	.0509	9.906E-04
OS 1870(113)	11.96	10.92	6.012E-04	.0372	7.333E-04	.0454	8.225E-04	.0509	9.906E-04
BOT 3970(113)	11.96	10.92	6.012E-04	.0372	7.333E-04	.0454	8.225E-04	.0509	9.906E-04
NOS 8470(113)	11.96	10.92	6.012E-04	.0372	7.333E-04	.0454	8.225E-04	.0509	9.906E-04
TOP 6871(113)	13.04	12.00	5.736E-04	.0355	6.996E-04	.0433	7.847E-04	.0485	9.442E-04
OS 1871(113)	13.04	12.00	5.736E-04	.0355	6.996E-04	.0433	7.847E-04	.0485	9.442E-04
BOT 3971(113)	13.04	12.00	5.736E-04	.0355	6.996E-04	.0433	7.847E-04	.0485	9.442E-04
NOS 8471(113)	13.04	12.00	5.736E-04	.0355	6.996E-04	.0433	7.847E-04	.0485	9.442E-04

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NASA-RI OH58

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
32	0	7.96	299.9	1281	34.99	-5.00	30.00	1.74	-1.88

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.023	.996	3775	2.013E-05	7.579E-08	1.002E 06	1.617E-02	2.684E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	80	.0486	4.454E-02	4.0884E-02
OP SIDE(OS)	7801	113	80	.0486	4.454E-02	4.0884E-02
BOTTOM(BOT)	8058	113	80	.0486	4.454E-02	4.0884E-02
TOP(TOP)	8011	113	80	.0486	4.454E-02	4.0884E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6872(113)	14.14	13.10	5.489E-04	.0339	6.696E-04	.0414	7.510E-04	.0464	9.037E-04
OS 1872(113)	14.14	13.10	5.489E-04	.0339	6.696E-04	.0414	7.510E-04	.0464	9.037E-04
BOT 3972(113)	14.14	13.10	5.489E-04	.0339	6.696E-04	.0414	7.510E-04	.0464	9.037E-04
NOS 8472(113)	14.14	13.10	5.489E-04	.0339	6.696E-04	.0414	7.510E-04	.0464	9.037E-04
TOP 6873(113)	15.22	14.18	5.277E-04	.0326	6.437E-04	.0398	7.219E-04	.0446	8.683E-04
OS 1873(113)	15.22	14.18	5.277E-04	.0326	6.437E-04	.0398	7.219E-04	.0446	8.683E-04
BOT 3973(113)	15.22	14.18	5.277E-04	.0326	6.437E-04	.0398	7.219E-04	.0446	8.683E-04
NOS 8473(113)	15.22	14.18	5.277E-04	.0326	6.437E-04	.0398	7.219E-04	.0446	8.683E-04
TOP 6874(113)	16.32	15.28	5.083E-04	.0314	6.200E-04	.0383	6.954E-04	.0430	8.360E-04
OS 1874(113)	16.32	15.28	5.083E-04	.0314	6.200E-04	.0383	6.954E-04	.0430	8.360E-04
BOT 3974(113)	16.32	15.28	5.083E-04	.0314	6.200E-04	.0383	6.954E-04	.0430	8.360E-04
NOS 8474(113)	16.32	15.28	5.083E-04	.0314	6.200E-04	.0383	6.954E-04	.0430	8.360E-04
TOP 6875(113)	17.40	16.36	4.913E-04	.0304	5.993E-04	.0370	6.722E-04	.0415	8.080E-04
OS 1875(113)	17.40	16.36	4.913E-04	.0304	5.993E-04	.0370	6.722E-04	.0415	8.080E-04
BOT 3975(113)	17.40	16.36	4.913E-04	.0304	5.993E-04	.0370	6.722E-04	.0415	8.080E-04
NOS 8475(113)	17.40	16.36	4.913E-04	.0304	5.993E-04	.0370	6.722E-04	.0415	8.080E-04
BOT 3976(113)	18.47	17.43	4.759E-04	.0294	5.805E-04	.0359	6.511E-04	.0402	7.827E-04
TOP 6876(113)	18.50	17.46	4.756E-04	.0294	5.801E-04	.0358	6.506E-04	.0402	7.821E-04
OS 1876(113)	18.50	17.46	4.756E-04	.0294	5.801E-04	.0358	6.506E-04	.0402	7.821E-04
NOS 8476(113)	18.50	17.46	4.756E-04	.0294	5.801E-04	.0358	6.506E-04	.0402	7.821E-04
TOP 6877(113)	19.57	18.53	4.616E-04	.0285	5.630E-04	.0348	6.314E-04	.0390	7.587E-04
OS 1877(113)	19.57	18.53	4.616E-04	.0285	5.630E-04	.0348	6.314E-04	.0390	7.587E-04
BOT 3977(113)	19.57	18.53	4.616E-04	.0285	5.630E-04	.0348	6.314E-04	.0390	7.587E-04
NOS 8477(113)	19.57	18.53	4.616E-04	.0285	5.630E-04	.0348	6.314E-04	.0390	7.587E-04
TOP 6878(113)	20.65	19.61	4.487E-04	.0277	5.473E-04	.0338	6.139E-04	.0379	7.376E-04
OS 1878(113)	20.65	19.61	4.487E-04	.0277	5.473E-04	.0338	6.139E-04	.0379	7.376E-04
BOT 3978(113)	20.65	19.61	4.487E-04	.0277	5.473E-04	.0338	6.139E-04	.0379	7.376E-04

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4/10/74

NASA-RI OH56

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
32	B	7.94	210.2	1281	34.99	-5.00	30.00	1.74	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.023	.998	3775	2.015E-05	7.579E-08	1.004E 06	1.619E-02	2.682E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	80	.0486	4.454E-02	4.0884E-02
UP SIDE(OS)	7801	113	80	.0486	4.454E-02	4.0884E-02
BOTTOM(BOT)	8058	113	89	.0486	4.454E-02	4.0884E-02
TOP(TOP)	8011	113	86	.0486	4.454E-02	4.0884E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
NOS 8478(113)	20.67	19.63	4.484E-04	.0277	5.470E-04	.0338	6.135E-04	.0379	7.371E-04
TOP 8879(113)	21.75	20.71	4.366E-04	.0270	5.326E-04	.0329	5.973E-04	.0369	7.174E-04
OS 1879(113)	21.75	20.71	4.366E-04	.0270	5.326E-04	.0329	5.973E-04	.0369	7.174E-04
BOT 3979(113)	21.75	20.71	4.366E-04	.0270	5.326E-04	.0329	5.973E-04	.0369	7.174E-04
NOS 8479(113)	21.75	20.71	4.366E-04	.0270	5.326E-04	.0329	5.973E-04	.0369	7.174E-04
TOP 8880(113)	22.83	21.79	4.257E-04	.0263	5.192E-04	.0321	5.824E-04	.0360	6.998E-04
BOT 3980(113)	22.83	21.79	4.257E-04	.0263	5.192E-04	.0321	5.824E-04	.0360	6.998E-04
NOS 8480(113)	22.83	21.79	4.257E-04	.0263	5.192E-04	.0321	5.824E-04	.0360	6.998E-04
OS 1880(113)	22.85	21.81	4.254E-04	.0263	5.189E-04	.0320	5.821E-04	.0359	6.987E-04
TOP 8881(113)	23.93	22.89	4.153E-04	.0257	5.066E-04	.0313	5.682E-04	.0351	6.824E-04
OS 1881(113)	23.93	22.89	4.153E-04	.0257	5.066E-04	.0313	5.682E-04	.0351	6.824E-04
BOT 3981(113)	23.93	22.89	4.153E-04	.0257	5.066E-04	.0313	5.682E-04	.0351	6.824E-04
NOS 8481(113)	23.93	22.89	4.153E-04	.0257	5.066E-04	.0313	5.682E-04	.0351	6.824E-04
TOP 8882(113)	25.00	23.96	4.059E-04	.0251	4.951E-04	.0306	5.553E-04	.0343	6.666E-04
OS 1882(113)	25.00	23.96	4.059E-04	.0251	4.951E-04	.0306	5.553E-04	.0343	6.666E-04
BOT 3982(113)	25.00	23.96	4.059E-04	.0251	4.951E-04	.0306	5.553E-04	.0343	6.666E-04
NOS 8482(113)	25.00	23.96	4.059E-04	.0251	4.951E-04	.0306	5.553E-04	.0343	6.666E-04
BOT 3983(113)	26.08	25.04	3.971E-04	.0245	4.843E-04	.0299	5.432E-04	.0335	6.521E-04
TOP 8883(113)	26.11	25.07	3.969E-04	.0245	4.841E-04	.0299	5.430E-04	.0335	6.518E-04
OS 1883(113)	26.11	25.07	3.969E-04	.0245	4.841E-04	.0299	5.430E-04	.0335	6.518E-04
NOS 8483(113)	26.11	25.07	3.969E-04	.0245	4.841E-04	.0299	5.430E-04	.0335	6.518E-04
TOP 8884(113)	27.18	26.14	3.886E-04	.0240	4.740E-04	.0293	5.317E-04	.0328	6.379E-04
OS 1884(113)	27.18	26.14	3.886E-04	.0240	4.740E-04	.0293	5.317E-04	.0328	6.379E-04
BOT 3984(113)	27.18	26.14	3.886E-04	.0240	4.740E-04	.0293	5.317E-04	.0328	6.379E-04
NOS 8484(113)	27.18	26.14	3.886E-04	.0240	4.740E-04	.0293	5.317E-04	.0328	6.379E-04

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
32	0	7.94	210.5	1281	34.99	-5.00	30.00	1.74	-1.08

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.023	.999	3775	2.018E-05	7.579E-08	1.005E 06	1.620E-02	2.680E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	80	.0486	4.454E-02	4.0884E-02
OP SIDE(OS)	7861	113	80	.0486	4.454E-02	4.0884E-02
BOTTOM(BOT)	8058	113	80	.0486	4.454E-02	4.0884E-02
TOP(TOP)	8011	113	80	.0486	4.454E-02	4.0884E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6885(113)	28.26	27.22	3.809E-04	.0235	4.645E-04	.0287	5.210E-04	.0322	6.254E-04
OS 1885(113)	28.26	27.22	3.809E-04	.0235	4.645E-04	.0287	5.210E-04	.0322	6.254E-04
BOT 3985(113)	28.26	27.22	3.809E-04	.0235	4.645E-04	.0287	5.210E-04	.0322	6.254E-04
NOS 8485(113)	28.26	27.22	3.809E-04	.0235	4.645E-04	.0287	5.210E-04	.0322	6.254E-04
TOP 6886(113)	29.36	28.32	3.734E-04	.0231	4.554E-04	.0281	5.108E-04	.0315	6.129E-04
OS 1886(113)	29.36	28.32	3.734E-04	.0231	4.554E-04	.0281	5.108E-04	.0315	6.129E-04
BOT 3986(113)	29.36	28.32	3.734E-04	.0231	4.554E-04	.0281	5.108E-04	.0315	6.129E-04
NOS 8486(113)	29.36	28.32	3.734E-04	.0231	4.554E-04	.0281	5.108E-04	.0315	6.129E-04
TOP 6887(113)	30.44	29.40	3.665E-04	.0226	4.470E-04	.0276	5.014E-04	.0310	6.016E-04
OS 1887(113)	30.44	29.40	3.665E-04	.0226	4.470E-04	.0276	5.014E-04	.0310	6.016E-04
BOT 3987(113)	30.44	29.40	3.665E-04	.0226	4.470E-04	.0276	5.014E-04	.0310	6.016E-04
NOS 8487(113)	30.44	29.40	3.665E-04	.0226	4.470E-04	.0276	5.014E-04	.0310	6.016E-04
TOP 6888(113)	31.51	30.47	3.600E-04	.0222	4.390E-04	.0271	4.924E-04	.0304	5.903E-04
OS 1888(113)	31.54	30.50	3.598E-04	.0222	4.389E-04	.0271	4.922E-04	.0304	5.903E-04
BOT 3988(113)	31.54	30.50	3.598E-04	.0222	4.389E-04	.0271	4.922E-04	.0304	5.903E-04
NOS 8488(113)	31.54	30.50	3.598E-04	.0222	4.389E-04	.0271	4.922E-04	.0304	5.903E-04
TOP 6889(113)	32.61	31.57	3.536E-04	.0218	4.313E-04	.0266	4.838E-04	.0299	5.799E-04
OS 1889(113)	32.61	31.57	3.536E-04	.0218	4.313E-04	.0266	4.838E-04	.0299	5.799E-04
BOT 3989(113)	32.61	31.57	3.536E-04	.0218	4.313E-04	.0266	4.838E-04	.0299	5.799E-04
NOS 8489(113)	32.61	31.57	3.536E-04	.0218	4.313E-04	.0266	4.838E-04	.0299	5.799E-04
BOT 3990(113)	33.69	32.65	3.477E-04	.0215	4.242E-04	.0262	4.757E-04	.0294	5.705E-04
TOP 6890(113)	33.71	32.67	3.476E-04	.0215	4.240E-04	.0262	4.756E-04	.0293	5.700E-04
OS 1890(113)	33.71	32.67	3.476E-04	.0215	4.240E-04	.0262	4.756E-04	.0293	5.700E-04
NOS 8490(113)	33.71	32.67	3.476E-04	.0215	4.240E-04	.0262	4.756E-04	.0293	5.700E-04
	33.81		MODEL HAS LEFT CENTERLINE						

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE

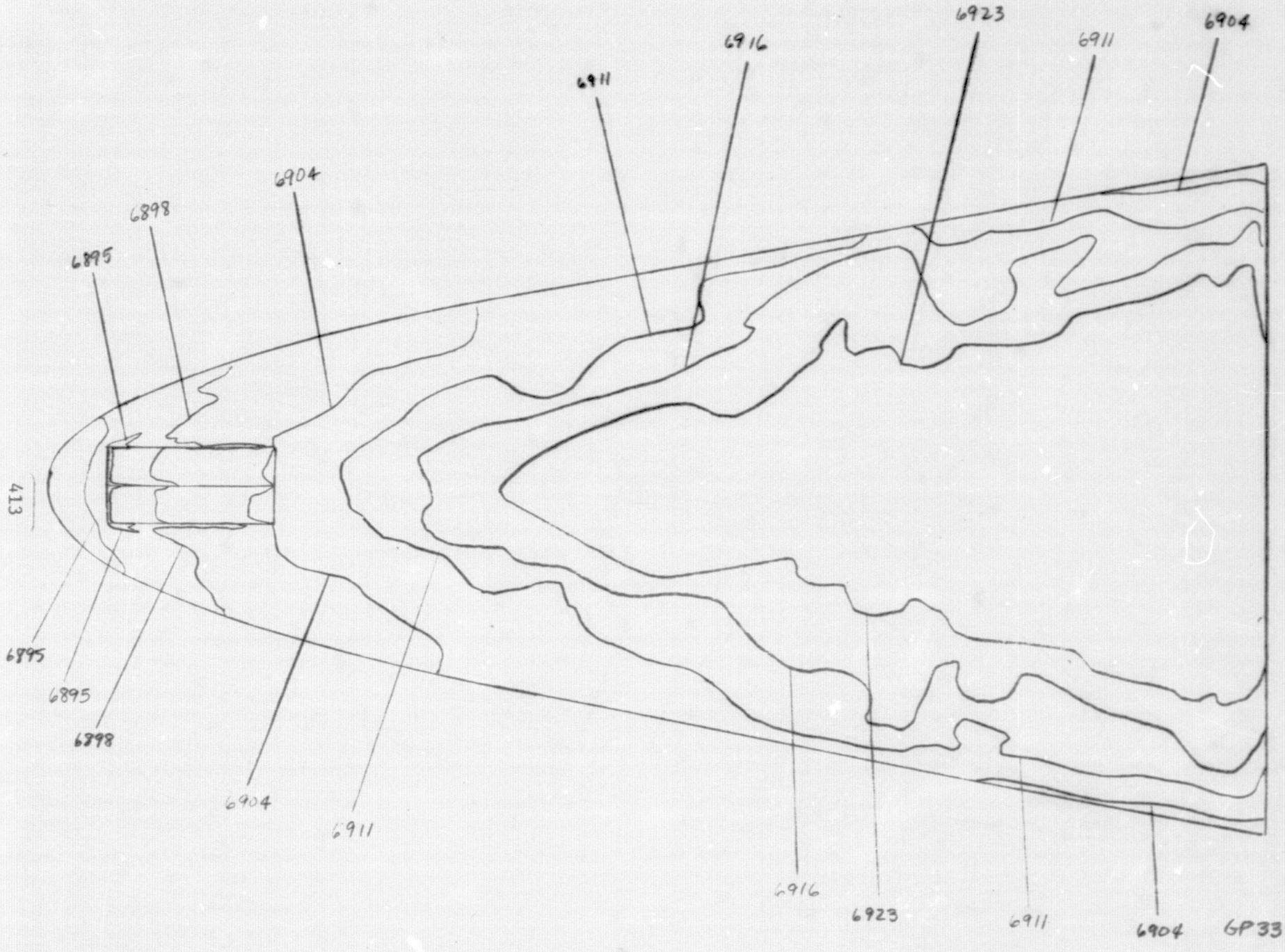
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
32	0	7.94	210.8	1281	34.99	-5.00	30.08	1.74	-1.88

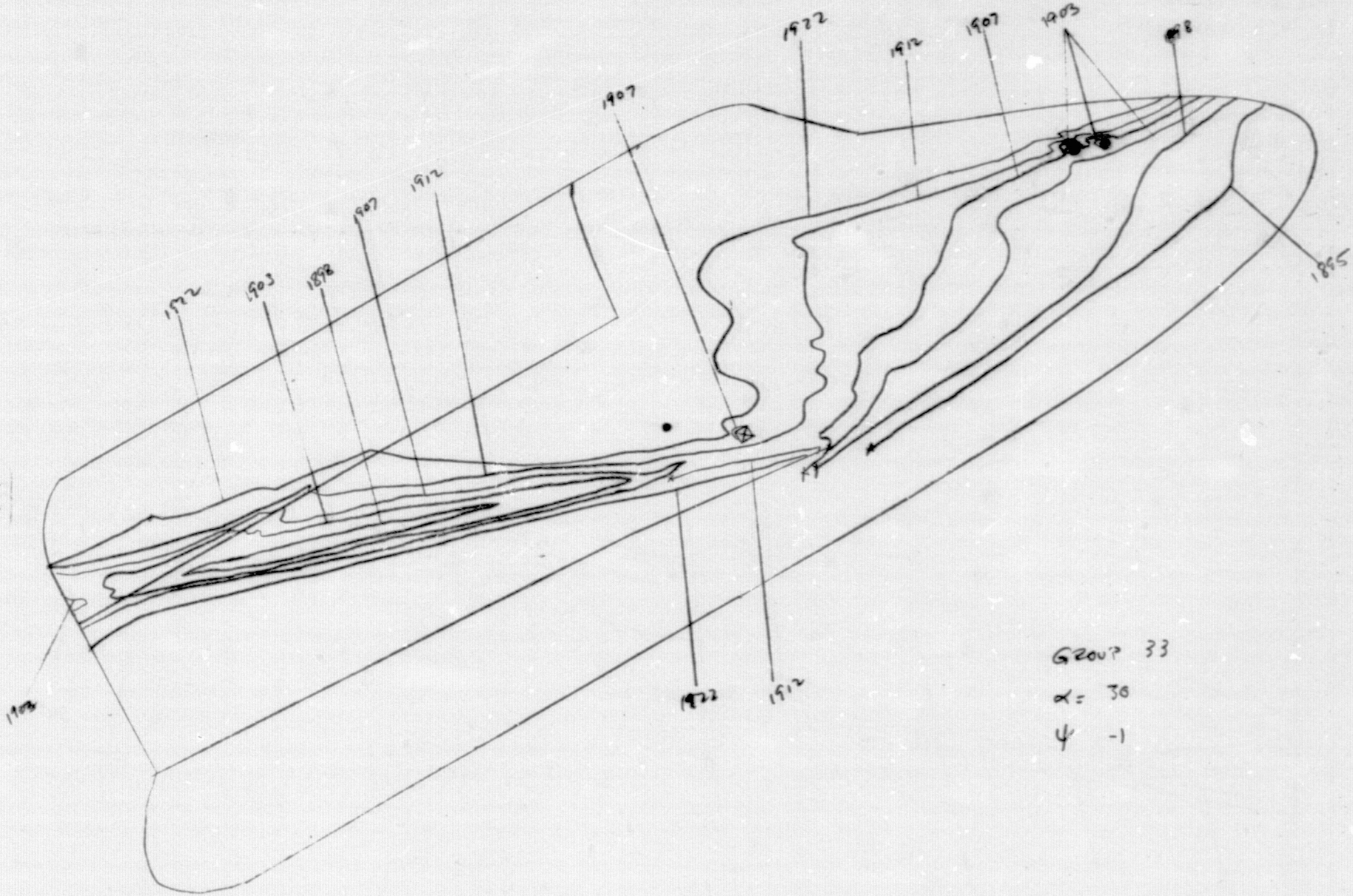
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.023	1.001	3775	2.021E-05	7.578E-08	1.007E 06	1.621E-02	2.678E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCKK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	80	.0486	4.454E-02	4.0884E-02
OP SIDE(OS)	7601	113	80	.0486	4.454E-02	4.0884E-02
BOTTOM(BOT)	8058	113	80	.0486	4.454E-02	4.0884E-02
TOP(TOP)	8011	113	80	.0486	4.454E-02	4.0884E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 6891(113)	34.79	33.75	3.420E-04	.0211	4.172E-04	.0258	4.679E-04	.0289	5.611E-04
OS 1891(113)	34.79	33.75	3.420E-04	.0211	4.172E-04	.0258	4.679E-04	.0289	5.611E-04
BOT 3991(113)	34.79	33.75	3.420E-04	.0211	4.172E-04	.0258	4.679E-04	.0289	5.611E-04
NOS 8491(113)	34.79	33.75	3.420E-04	.0211	4.172E-04	.0258	4.679E-04	.0289	5.611E-04



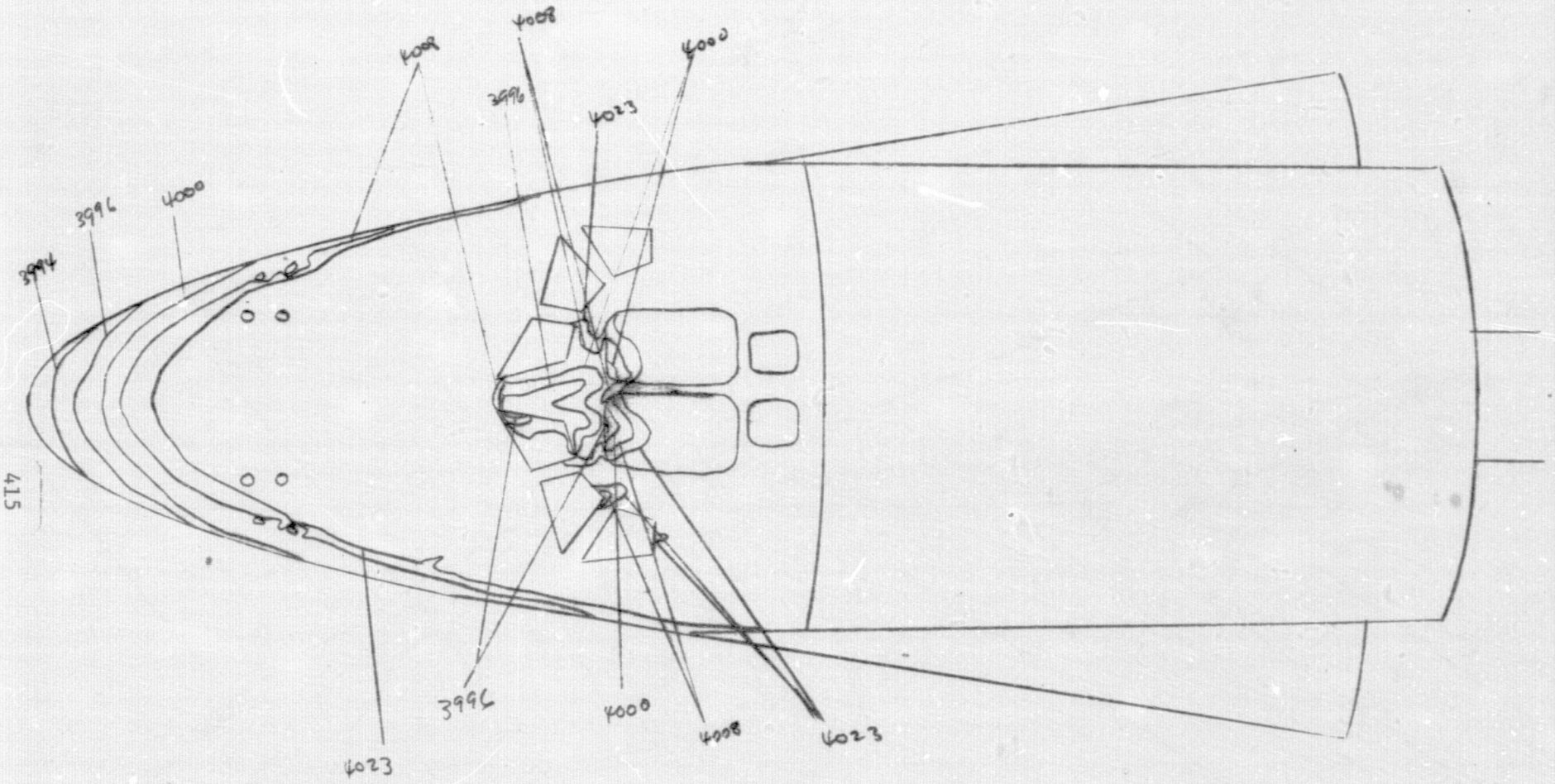
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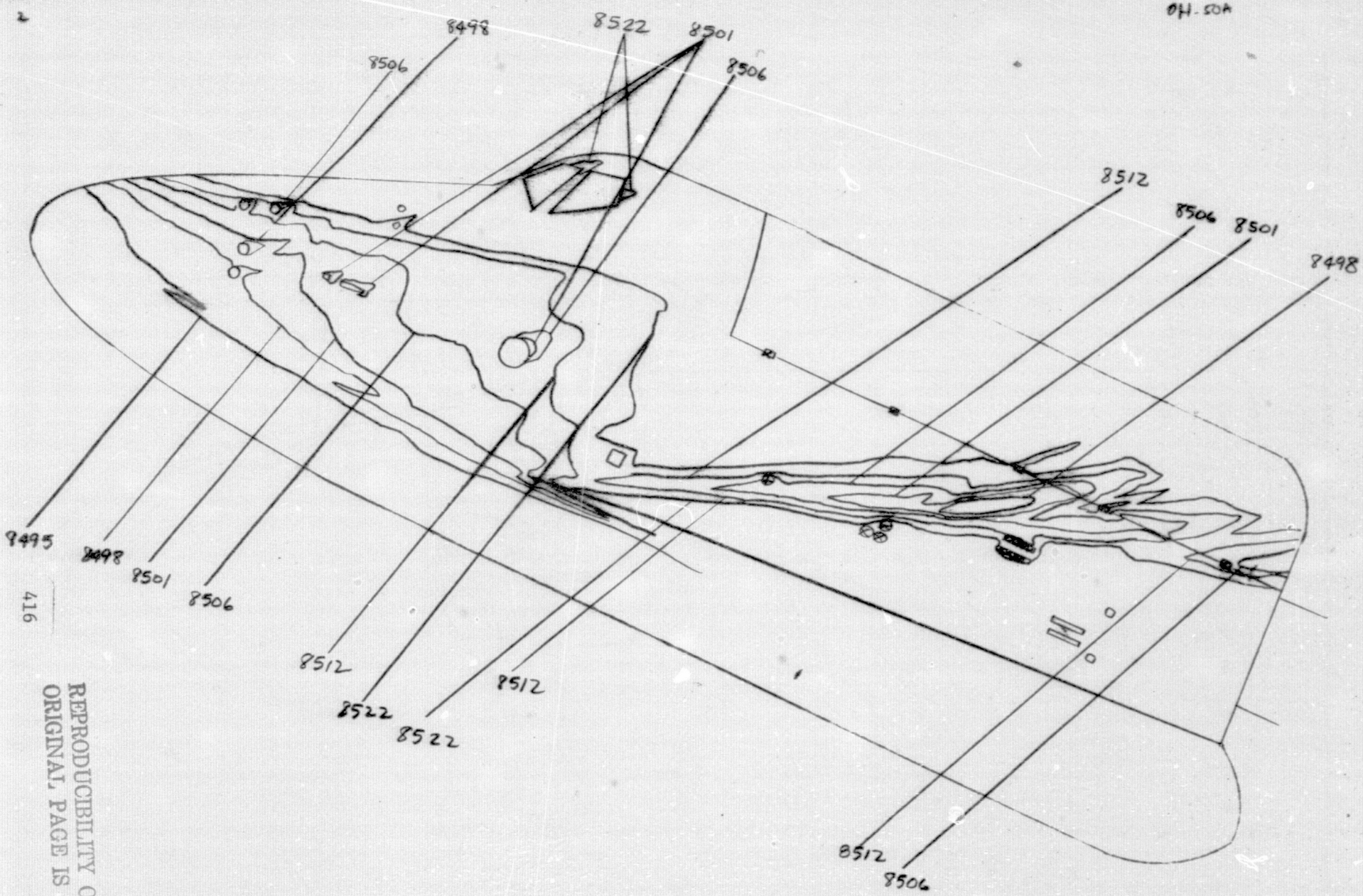
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NASA-RI 0H59

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
33	0	7.94	210.1	1273	29.99	-.00	30.00	2.00	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.023	.997	3763	2.027E-05	7.532E-08	1.013E 06	1.616E-02	2.672E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	79	.0486	0	0
OP SIDE(OS)	7801	113	79	.0486	0	0
BOTTOM(BOT)	8058	113	79	.0486	0	0
TOP(TOP)	8011	175	79	.0518	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 6892(175)		.03	MODEL HAS NOT REACHED CENTERLINE						
OS 1892(113)		.03	MODEL HAS NOT REACHED CENTERLINE						
BO 3992(113)		.03	MODEL HAS NOT REACHED CENTERLINE						
NO 8492(113)		.03	MODEL HAS NOT REACHED CENTERLINE						
TO 6893(175)		1.10	MODEL HAS NOT REACHED CENTERLINE						
OS 1893(113)		1.10	MODEL HAS NOT REACHED CENTERLINE						
BO 3993(113)		1.10	MODEL HAS NOT REACHED CENTERLINE						
NO 8493(113)		1.10	MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =		1.75							
TOP 6894(175)	2.18	1.19	6.135E-03	.3794	7.610E-03	.4707	8.655E-03	.5353	1.082E-02
OS 1894(113)	2.18	1.19	1.895E-03	.1172	2.310E-03	.1429	2.595E-03	.1605	3.106E-03
BOT 3994(113)	2.18	1.19	1.895E-03	.1172	2.310E-03	.1429	2.595E-03	.1605	3.106E-03
NOS 8494(113)	2.18	1.19	1.895E-03	.1172	2.310E-03	.1429	2.595E-03	.1605	3.106E-03
TOP 6895(175)	3.25	2.27	4.449E-03	.2751	5.519E-03	.3413	6.276E-03	.3881	7.266E-03
OS 1895(113)	3.25	2.27	1.374E-03	.0850	1.675E-03	.1036	1.882E-03	.1164	2.252E-03
BOT 3995(113)	3.25	2.27	1.374E-03	.0850	1.675E-03	.1036	1.882E-03	.1164	2.252E-03
NOS 8495(113)	3.25	2.27	1.374E-03	.0850	1.675E-03	.1036	1.882E-03	.1164	2.252E-03
BOT 3996(113)	4.33	3.35	1.132E-03	.0700	1.380E-03	.0853	1.550E-03	.0959	1.855E-03
TOP 6896(175)	4.36	3.37	3.651E-03	.2257	4.529E-03	.2800	5.150E-03	.3185	5.962E-03
OS 1896(113)	4.36	3.37	1.128E-03	.0697	1.374E-03	.0850	1.544E-03	.0955	1.848E-03
NOS 8496(113)	4.36	3.37	1.128E-03	.0697	1.374E-03	.0850	1.544E-03	.0955	1.848E-03
TOP 6897(175)	5.43	4.45	3.178E-03	.1965	3.943E-03	.2438	4.484E-03	.2773	5.191E-03
OS 1897(113)	5.43	4.45	9.817E-04	.0607	1.197E-03	.0740	1.344E-03	.0831	1.609E-03
BOT 3997(113)	5.43	4.45	9.817E-04	.0607	1.197E-03	.0740	1.344E-03	.0831	1.609E-03
NOS 8497(113)	5.43	4.45	9.817E-04	.0607	1.197E-03	.0740	1.344E-03	.0831	1.609E-03
TOP 6898(175)	6.51	5.52	2.852E-03	.1764	3.538E-03	.2188	4.024E-03	.2488	4.658E-03
OS 1898(113)	6.51	5.52	8.809E-04	.0545	1.074E-03	.0664	1.206E-03	.0746	1.443E-03
BOT 3998(113)	6.51	5.52	8.809E-04	.0545	1.074E-03	.0664	1.206E-03	.0746	1.443E-03
NOS 8498(113)	6.51	5.52	8.809E-04	.0545	1.074E-03	.0664	1.206E-03	.0746	1.443E-03

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NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE

VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
33	0	7.94	210.3	1273	29.99	-.00	30.00	2.00	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.023	.998	3763	2.029E-05	7.531E-08	1.014E 06	1.617E-02	2.671E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	79	.0486	4.631E-02	4.2601E-02
OP SIDE(OS)	7801	113	79	.0486	4.631E-02	4.2601E-02
BOTTOM(BOT)	8058	113	79	.0486	4.631E-02	4.2601E-02
TOP(TOP)	8011	175	79	.0518	1.308E-01	1.2940E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6899(175)	7.61	6.63	2.604E-03	.1610	3.231E-03	.1998	3.674E-03	.2272	4.253E-03
OS 1899(113)	7.61	6.63	8.044E-04	.0497	9.805E-04	.0606	1.101E-03	.0681	1.318E-03
BOT 3999(113)	7.61	6.63	8.044E-04	.0497	9.805E-04	.0606	1.101E-03	.0681	1.318E-03
NOS 8499(113)	7.61	6.63	8.044E-04	.0497	9.805E-04	.0606	1.101E-03	.0681	1.318E-03
TOP 6900(175)	8.68	7.70	2.415E-03	.1494	2.996E-03	.1853	3.408E-03	.2108	3.947E-03
OS 1900(113)	8.68	7.70	7.460E-04	.0461	9.094E-04	.0562	1.022E-03	.0632	1.223E-03
BOT 4000(113)	8.68	7.70	7.460E-04	.0461	9.094E-04	.0562	1.022E-03	.0632	1.223E-03
NOS 8500(113)	8.68	7.70	7.460E-04	.0461	9.094E-04	.0562	1.022E-03	.0632	1.223E-03
BOT 4001(113)	9.76	8.78	6.988E-04	.0432	8.518E-04	.0527	9.569E-04	.0592	1.145E-03
TOP 6901(175)	9.79	8.80	2.259E-03	.1397	2.803E-03	.1733	3.187E-03	.1971	3.690E-03
OS 1901(113)	9.79	8.80	6.978E-04	.0431	8.506E-04	.0526	9.556E-04	.0591	1.143E-03
NOS 8501(113)	9.79	8.80	6.978E-04	.0431	8.506E-04	.0526	9.556E-04	.0591	1.143E-03
TOP 6902(175)	10.86	9.88	2.133E-03	.1319	2.646E-03	.1636	3.009E-03	.1861	3.485E-03
OS 1902(113)	10.86	9.88	6.587E-04	.0407	8.029E-04	.0497	9.020E-04	.0558	1.080E-03
BOT 4002(113)	10.86	9.88	6.587E-04	.0407	8.029E-04	.0497	9.020E-04	.0558	1.080E-03
NOS 8502(113)	10.86	9.88	6.587E-04	.0407	8.029E-04	.0497	9.020E-04	.0558	1.080E-03
BOT 4003(113)	11.94	10.96	6.255E-04	.0387	7.625E-04	.0472	8.566E-04	.0530	1.026E-03
TOP 6903(175)	11.96	10.98	2.023E-03	.1251	2.509E-03	.1552	2.854E-03	.1765	3.305E-03
OS 1903(113)	11.96	10.98	6.248E-04	.0386	7.616E-04	.0471	8.556E-04	.0529	1.024E-03
NOS 8503(113)	11.96	10.98	6.248E-04	.0386	7.616E-04	.0471	8.556E-04	.0529	1.024E-03
TOP 6904(175)	13.04	12.06	1.930E-03	.1194	2.395E-03	.1481	2.724E-03	.1684	3.153E-03
OS 1904(113)	13.04	12.06	5.963E-04	.0369	7.268E-04	.0449	8.165E-04	.0505	9.771E-04
BOT 4004(113)	13.04	12.06	5.963E-04	.0369	7.268E-04	.0449	8.165E-04	.0505	9.771E-04
NOS 8504(113)	13.04	12.06	5.963E-04	.0369	7.268E-04	.0449	8.165E-04	.0505	9.771E-04
OS 1905(113)	14.12	13.13	5.713E-04	.0353	6.964E-04	.0431	7.823E-04	.0484	9.371E-04
BOT 4005(113)	14.12	13.13	5.713E-04	.0353	6.964E-04	.0431	7.823E-04	.0484	9.371E-04
NOS 8505(113)	14.12	13.13	5.713E-04	.0353	6.964E-04	.0431	7.823E-04	.0484	9.371E-04

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NASA-RI OH50

VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
33	0	7.94	210.1	1273	29.99	-.00	30.00	2.00	-1.08

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.023	.997	3763	2.027E-05	7.532E-08	1.013E 06	1.616E-02	2.672E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	79	.0486	4.631E-02	4.2601E-02
OP SIDE(OS)	7601	113	79	.0486	4.631E-02	4.2601E-02
BOTTOM(BOT)	8058	113	79	.0486	4.631E-02	4.2601E-02
TOP(TOP)	8011	175	79	.0518	1.308E-01	1.2940E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6905(175)	14.14	13.16	1.848E-03	.1143	2.292E-03	.1418	2.607E-03	.1612	3.018E-03
TOP 6906(175)	15.22	14.23	1.777E-03	.1099	2.206E-03	.1363	2.507E-03	.1550	2.903E-03
OS 1906(113)	15.22	14.23	5.488E-04	.0339	6.689E-04	.0414	7.515E-04	.0465	8.997E-04
BOT 4006(113)	15.22	14.23	5.488E-04	.0339	6.689E-04	.0414	7.515E-04	.0465	8.997E-04
NOS 8506(113)	15.22	14.23	5.488E-04	.0339	6.689E-04	.0414	7.515E-04	.0465	8.997E-04
TOP 6907(175)	16.29	15.31	1.713E-03	.1059	2.125E-03	.1314	2.417E-03	.1494	2.798E-03
OS 1907(113)	16.29	15.31	5.291E-04	.0327	6.450E-04	.0399	7.246E-04	.0448	8.671E-04
BOT 4007(113)	16.29	15.31	5.291E-04	.0327	6.450E-04	.0399	7.246E-04	.0448	8.671E-04
NOS 8507(113)	16.29	15.31	5.291E-04	.0327	6.450E-04	.0399	7.246E-04	.0448	8.671E-04
TOP 6908(175)	17.40	16.41	1.655E-03	.1023	2.053E-03	.1269	2.334E-03	.1443	2.702E-03
OS 1908(113)	17.40	16.41	5.111E-04	.0316	6.230E-04	.0385	6.998E-04	.0433	8.375E-04
BOT 4008(113)	17.40	16.41	5.111E-04	.0316	6.230E-04	.0385	6.998E-04	.0433	8.375E-04
NOS 8508(113)	17.40	16.41	5.111E-04	.0316	6.230E-04	.0385	6.998E-04	.0433	8.375E-04
TOP 6909(175)	18.47	17.49	1.603E-03	.0991	1.988E-03	.1230	2.261E-03	.1398	2.618E-03
OS 1909(113)	18.47	17.49	4.951E-04	.0306	6.035E-04	.0373	6.780E-04	.0419	8.113E-04
BOT 4009(113)	18.47	17.49	4.951E-04	.0306	6.035E-04	.0373	6.780E-04	.0419	8.113E-04
NOS 8509(113)	18.47	17.49	4.951E-04	.0306	6.035E-04	.0373	6.780E-04	.0419	8.113E-04
BOT 4010(113)	19.55	18.56	4.805E-04	.0297	5.857E-04	.0362	6.580E-04	.0407	7.877E-04
TOP 6910(175)	19.57	18.59	1.555E-03	.0962	1.929E-03	.1193	2.193E-03	.1357	2.540E-03
OS 1910(113)	19.57	18.59	4.802E-04	.0297	5.853E-04	.0362	6.576E-04	.0407	7.872E-04
NOS 8510(113)	19.57	18.59	4.802E-04	.0297	5.853E-04	.0362	6.576E-04	.0407	7.872E-04
TOP 6911(175)	20.65	19.67	1.512E-03	.0935	1.875E-03	.1160	2.133E-03	.1319	2.470E-03
OS 1911(113)	20.65	19.67	4.669E-04	.0289	5.691E-04	.0352	6.393E-04	.0395	7.654E-04
BOT 4011(113)	20.65	19.67	4.669E-04	.0289	5.691E-04	.0352	6.393E-04	.0395	7.654E-04
NOS 8511(113)	20.65	19.67	4.669E-04	.0289	5.691E-04	.0352	6.393E-04	.0395	7.654E-04

NASA-RI OH58

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
33	0	7.94	210.2	1273	29.99	-.00	30.00	2.00	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.023	.998	3763	2.028E-05	7.531E-08	1.013E 06	1.617E-02	2.672E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	YBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	79	.0486	4.631E-02	4.2601E-02
OP SIDE(OS)	7E01	113	79	.0486	4.631E-02	4.2601E-02
BOTTOM(BOT)	8058	113	79	.0486	4.631E-02	4.2601E-02
TOP(TOP)	8011	175	79	.0518	1.308E-01	1.2940E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
OS 1912(113)	21.72	20.74	4.546E-04	.0281	5.541E-04	.0343	6.225E-04	.0385	7.460E-04
BOT 4012(113)	21.72	20.74	4.546E-04	.0281	5.541E-04	.0343	6.225E-04	.0385	7.460E-04
NOS 8512(113)	21.72	20.74	4.546E-04	.0281	5.541E-04	.0343	6.225E-04	.0385	7.460E-04
TOP 6912(175)	21.75	20.77	1.471E-03	.0910	1.825E-03	.1129	2.075E-03	.1284	2.407E-03
TOP 6913(175)	22.83	21.84	1.434E-03	.0887	1.779E-03	.1100	2.023E-03	.1251	2.342E-03
OS 1913(113)	22.83	21.84	4.430E-04	.0274	5.400E-04	.0334	6.066E-04	.0375	7.259E-04
BOT 4013(113)	22.83	21.84	4.430E-04	.0274	5.400E-04	.0334	6.066E-04	.0375	7.259E-04
NOS 8513(113)	22.83	21.84	4.430E-04	.0274	5.400E-04	.0334	6.066E-04	.0375	7.259E-04
TOP 6914(175)	23.90	22.92	1.400E-03	.0866	1.737E-03	.1075	1.975E-03	.1222	2.289E-03
OS 1914(113)	23.90	22.92	4.325E-04	.0268	5.272E-04	.0326	5.922E-04	.0366	7.093E-04
BOT 4014(113)	23.90	22.92	4.325E-04	.0268	5.272E-04	.0326	5.922E-04	.0366	7.093E-04
NOS 8514(113)	23.90	22.92	4.325E-04	.0268	5.272E-04	.0326	5.922E-04	.0366	7.093E-04
BOT 4015(113)	24.98	24.00	4.227E-04	.0261	5.152E-04	.0319	5.788E-04	.0358	6.929E-04
TOP 6915(175)	25.00	24.02	1.368E-03	.0846	1.697E-03	.1050	1.930E-03	.1194	2.236E-03
OS 1915(113)	25.00	24.02	4.224E-04	.0261	5.149E-04	.0319	5.785E-04	.0358	6.928E-04
NOS 8515(113)	25.00	24.02	4.224E-04	.0261	5.149E-04	.0319	5.785E-04	.0358	6.928E-04
TOP 6916(175)	26.08	25.10	1.338E-03	.0828	1.660E-03	.1027	1.888E-03	.1168	2.186E-03
OS 1916(113)	26.08	25.10	4.133E-04	.0256	5.038E-04	.0312	5.659E-04	.0350	6.775E-04
BOT 4016(113)	26.08	25.10	4.133E-04	.0256	5.038E-04	.0312	5.659E-04	.0350	6.775E-04
NOS 8516(113)	26.08	25.10	4.133E-04	.0256	5.038E-04	.0312	5.659E-04	.0350	6.775E-04
TOP 6917(175)	27.16	26.17	1.310E-03	.0810	1.625E-03	.1005	1.848E-03	.1143	2.141E-03
OS 1917(113)	27.16	26.17	4.047E-04	.0250	4.933E-04	.0305	5.542E-04	.0343	6.634E-04
BOT 4017(113)	27.16	26.17	4.047E-04	.0250	4.933E-04	.0305	5.542E-04	.0343	6.634E-04
NOS 8517(113)	27.18	26.20	4.045E-04	.0250	4.931E-04	.0305	5.539E-04	.0343	6.631E-04
TOP 6918(175)	28.26	27.27	1.284E-03	.0794	1.592E-03	.0985	1.811E-03	.1120	2.098E-03
OS 1918(113)	28.26	27.27	3.964E-04	.0245	4.832E-04	.0299	5.429E-04	.0336	6.502E-04
BOT 4018(113)	28.26	27.27	3.964E-04	.0245	4.832E-04	.0299	5.429E-04	.0336	6.502E-04
NOS 8518(113)	28.26	27.27	3.964E-04	.0245	4.832E-04	.0299	5.429E-04	.0336	6.502E-04

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NASA-RI OH56 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
33	0	7.94	210.1	1273	29.99	-.00	30.00	2.00	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.023	.997	3763	2.027E-05	7.531E-08	1.013E 06	1.616E-02	2.672E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	79	.0486	4.631E-02	4.2601E-02
OP SIDE(OS)	7801	113	79	.0486	4.631E-02	4.2601E-02
BOTTOM(BOT)	8058	113	79	.0486	4.631E-02	4.2601E-02
TOP(TOP)	8011	175	79	.0518	1.308E-01	1.2940E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6919(175)	29.33	28.35	1.259E-03	.0779	1.562E-03	.0966	1.776E-03	.1099	2.058E-03
OS 1919(113)	29.33	28.35	3.888E-04	.0241	4.740E-04	.0293	5.325E-04	.0329	6.377E-04
BOT 4019(113)	29.33	28.35	3.888E-04	.0241	4.740E-04	.0293	5.325E-04	.0329	6.377E-04
NOS 8519(113)	29.33	28.35	3.888E-04	.0241	4.740E-04	.0293	5.325E-04	.0329	6.377E-04
BOT 4020(113)	30.41	29.43	3.817E-04	.0236	4.652E-04	.0288	5.226E-04	.0323	6.260E-04
TOP 6920(175)	30.44	29.45	1.235E-03	.0764	1.532E-03	.0948	1.743E-03	.1078	2.020E-03
OS 1920(113)	30.44	29.45	3.815E-04	.0236	4.650E-04	.0288	5.224E-04	.0323	6.260E-04
NOS 8520(113)	30.44	29.45	3.815E-04	.0236	4.650E-04	.0288	5.224E-04	.0323	6.260E-04
TOP 6921(175)	31.51	30.53	1.213E-03	.0751	1.505E-03	.0931	1.712E-03	.1059	1.983E-03
OS 1921(113)	31.51	30.53	3.747E-04	.0232	4.568E-04	.0283	5.131E-04	.0317	6.146E-04
BOT 4021(113)	31.51	30.53	3.747E-04	.0232	4.568E-04	.0283	5.131E-04	.0317	6.146E-04
NOS 8521(113)	31.51	30.53	3.747E-04	.0232	4.568E-04	.0283	5.131E-04	.0317	6.146E-04
TOP 6922(175)	32.59	31.60	1.192E-03	.0738	1.479E-03	.0915	1.682E-03	.1041	1.949E-03
OS 1922(113)	32.59	31.60	3.683E-04	.0228	4.489E-04	.0278	5.043E-04	.0312	6.040E-04
BOT 4022(113)	32.59	31.60	3.683E-04	.0228	4.489E-04	.0278	5.043E-04	.0312	6.040E-04
NOS 8522(113)	32.59	31.60	3.683E-04	.0228	4.489E-04	.0278	5.043E-04	.0312	6.040E-04
TOP 6923(175)	33.69	32.71	1.172E-03	.0725	1.454E-03	.0900	1.654E-03	.1023	1.916E-03
OS 1923(113)	33.69	32.71	3.620E-04	.0224	4.413E-04	.0273	4.958E-04	.0307	5.937E-04
BOT 4023(113)	33.69	32.71	3.620E-04	.0224	4.413E-04	.0273	4.958E-04	.0307	5.937E-04
NOS 8523(113)	33.69	32.71	3.620E-04	.0224	4.413E-04	.0273	4.958E-04	.0307	5.937E-04
	34.34		MODEL HAS LEFT CENTERLINE						
TOP 6924(175)	34.76	33.78	1.153E-03	.0713	1.431E-03	.0885	1.627E-03	.1006	1.884E-03
OS 1924(113)	34.76	33.78	3.562E-04	.0220	4.342E-04	.0269	4.878E-04	.0302	5.839E-04
BOT 4024(113)	34.76	33.78	3.562E-04	.0220	4.342E-04	.0269	4.878E-04	.0302	5.839E-04
NOS 8524(113)	34.76	33.78	3.562E-04	.0220	4.342E-04	.0269	4.878E-04	.0302	5.839E-04

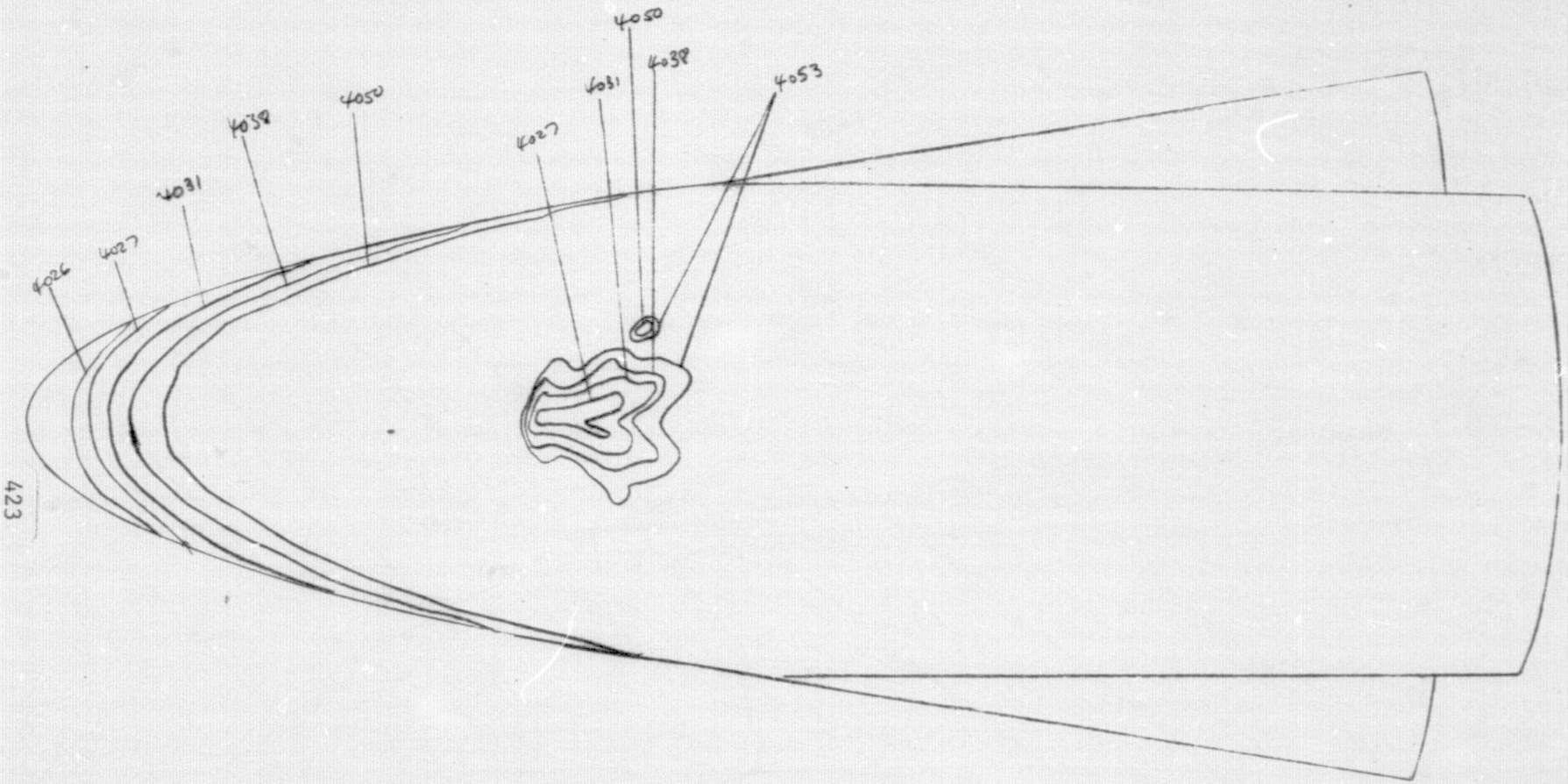
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GROUP 34

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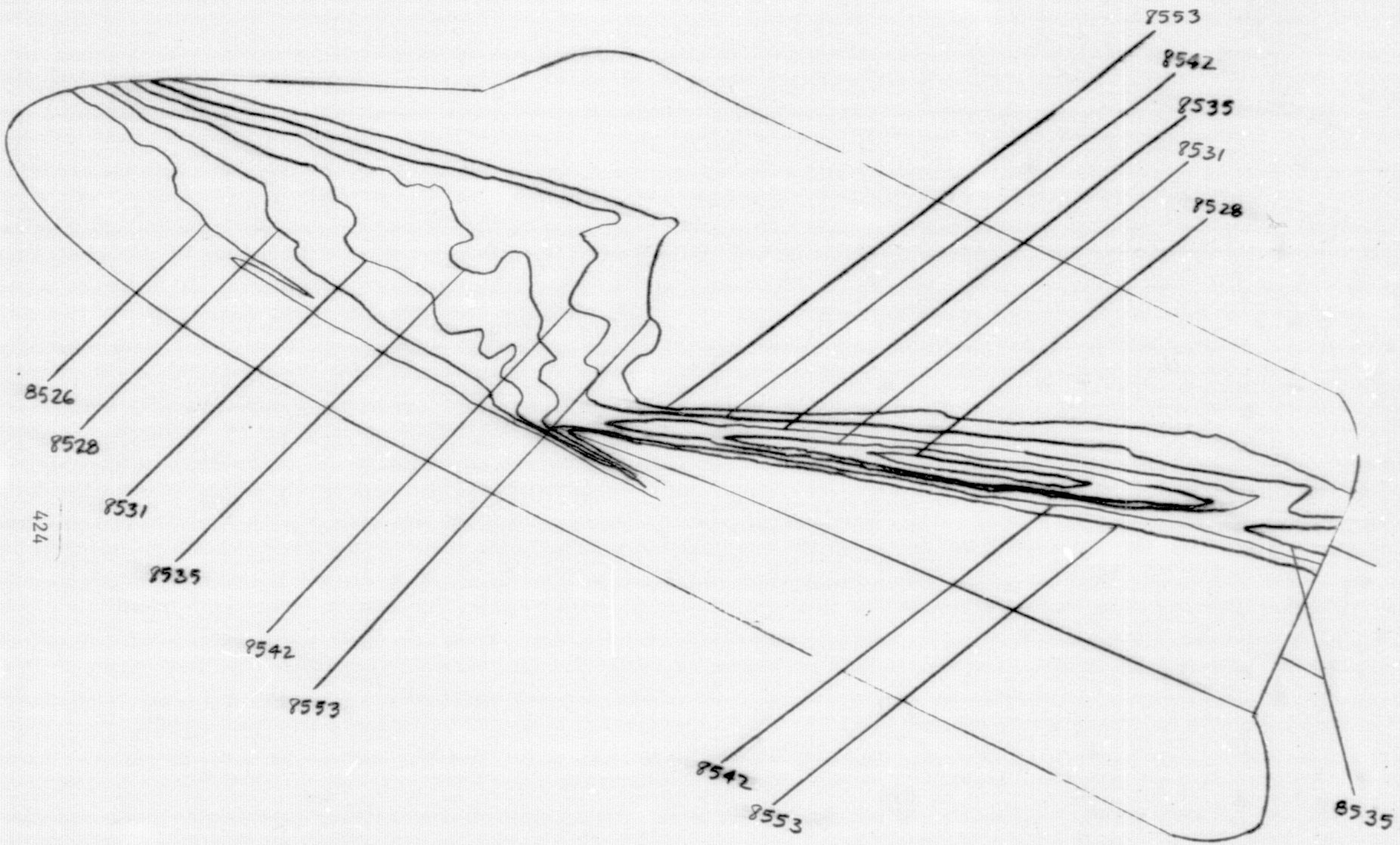
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GROUP 34
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4/10/74

NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE

VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
34	8	7.94	211.8	1271	30.00	-.01	30.09	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.4	.023	1.092	3760	2.039E-0.	7.519E-08	1.020E 06	1.619E-02	2.664E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	83	.0486	0	0
OP SIDE(OS)	7687	113	83	.0486	0	0
BOTTOM(BOT)	8058	113	83	.0486	0	0
TOP(TOP)	8039	113	83	.0486	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 6950(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 1950(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 6951(113)	1.08		MODEL HAS NOT REACHED CENTERLINE						
OS 1951(113)	1.08		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 6952(113)	2.05	1.04	1.798E-03	.1110	2.196E-03	.1356	2.466E-03	.1523	2.936E-03
OS 1952(113)	2.05	1.04	1.798E-03	.1110	2.196E-03	.1356	2.466E-03	.1523	2.936E-03
BOT 4025(113)	2.05	1.04	1.798E-03	.1110	2.196E-03	.1356	2.466E-03	.1523	2.936E-03
NOS 8525(113)	2.05	1.04	1.798E-03	.1110	2.196E-03	.1356	2.466E-03	.1523	2.936E-03
TOP 6953(113)	3.15	2.14	1.253E-03	.0774	1.531E-03	.0945	1.719E-03	.1062	2.046E-03
OS 1953(113)	3.15	2.14	1.253E-03	.0774	1.531E-03	.0945	1.719E-03	.1062	2.046E-03
BOT 4026(113)	3.15	2.14	1.253E-03	.0774	1.531E-03	.0945	1.719E-03	.1062	2.046E-03
NOS 8526(113)	3.15	2.14	1.253E-03	.0774	1.531E-03	.0945	1.719E-03	.1062	2.046E-03
TOP 6954(113)	4.23	3.22	1.022E-03	.0631	1.249E-03	.0771	1.402E-03	.0866	1.669E-03
OS 1954(113)	4.23	3.22	1.022E-03	.0631	1.249E-03	.0771	1.402E-03	.0866	1.669E-03
BOT 4027(113)	4.23	3.22	1.022E-03	.0631	1.249E-03	.0771	1.402E-03	.0866	1.669E-03
NOS 8527(113)	4.23	3.22	1.022E-03	.0631	1.249E-03	.0771	1.402E-03	.0866	1.669E-03
BOT 4028(113)	5.31	4.29	8.850E-04	.0546	1.081E-03	.0667	1.214E-03	.0749	1.443E-03
TOP 6955(113)	5.33	4.32	8.824E-04	.0545	1.078E-03	.0666	1.210E-03	.0747	1.440E-03
OS 1955(113)	5.33	4.32	8.824E-04	.0545	1.078E-03	.0666	1.210E-03	.0747	1.440E-03
NOS 8528(113)	5.33	4.32	8.824E-04	.0545	1.078E-03	.0666	1.210E-03	.0747	1.440E-03
TOP 6956(113)	6.41	5.40	7.895E-04	.0487	9.643E-04	.0595	1.083E-03	.0668	1.287E-03
OS 1956(113)	6.41	5.40	7.895E-04	.0487	9.643E-04	.0595	1.083E-03	.0668	1.287E-03
BOT 4029(113)	6.41	5.40	7.895E-04	.0487	9.643E-04	.0595	1.083E-03	.0668	1.287E-03
NOS 8529(113)	6.41	5.40	7.895E-04	.0487	9.643E-04	.0595	1.083E-03	.0668	1.287E-03
TOP 6957(113)	7.48	6.47	7.209E-04	.0445	8.805E-04	.0544	9.887E-04	.0610	1.176E-03
OS 1957(113)	7.48	6.47	7.209E-04	.0445	8.805E-04	.0544	9.887E-04	.0610	1.176E-03
BOT 4030(113)	7.48	6.47	7.209E-04	.0445	8.805E-04	.0544	9.887E-04	.0610	1.176E-03
NOS 8530(113)	7.48	6.47	7.209E-04	.0445	8.805E-04	.0544	9.887E-04	.0610	1.176E-03

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VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
34	0	7.94	211.1	1271	30.00	-.01	30.00	-2.00	1.08

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.4	.023	1.002	3760	2.040E-05	7.519E-08	1.020E 06	1.620E-02	2.663E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	83	.0486	4.121E-02	3.7737E-02
OP SIDE(OS)	7687	113	83	.0486	4.121E-02	3.7737E-02
BOTTOM(BOT)	8058	113	83	.0486	4.121E-02	3.7737E-02
TOP(TOP)	8039	113	83	.0486	4.121E-02	3.7737E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6958(113)	8.58	7.57	6.664E-04	.0411	8.140E-04	.0503	9.140E-04	.0564	1.087E-03
OS 1958(113)	8.58	7.57	6.664E-04	.0411	8.140E-04	.0503	9.140E-04	.0564	1.087E-03
BOT 4031(113)	8.58	7.57	6.664E-04	.0411	8.140E-04	.0503	9.140E-04	.0564	1.087E-03
NOS 8531(113)	8.58	7.57	6.664E-04	.0411	8.140E-04	.0503	9.140E-04	.0564	1.087E-03
TOP 6959(113)	9.66	8.65	6.236E-04	.0385	7.617E-04	.0470	8.553E-04	.0528	1.018E-03
OS 1959(113)	9.66	8.65	6.236E-04	.0385	7.617E-04	.0470	8.553E-04	.0528	1.018E-03
BOT 4032(113)	9.66	8.65	6.236E-04	.0385	7.617E-04	.0470	8.553E-04	.0528	1.018E-03
NOS 8532(113)	9.66	8.65	6.236E-04	.0385	7.617E-04	.0470	8.553E-04	.0528	1.018E-03
BOT 4033(113)	10.74	9.73	5.881E-04	.0363	7.183E-04	.0443	8.066E-04	.0498	9.589E-04
TOP 6960(113)	10.76	9.75	5.873E-04	.0363	7.174E-04	.0443	8.055E-04	.0497	9.581E-04
OS 1960(113)	10.76	9.75	5.873E-04	.0363	7.174E-04	.0443	8.055E-04	.0497	9.581E-04
NOS 8533(113)	10.76	9.75	5.873E-04	.0363	7.174E-04	.0443	8.055E-04	.0497	9.581E-04
TOP 6961(113)	11.84	10.83	5.574E-04	.0344	6.808E-04	.0420	7.644E-04	.0472	9.093E-04
OS 1961(113)	11.84	10.83	5.574E-04	.0344	6.808E-04	.0420	7.644E-04	.0472	9.093E-04
BOT 4034(113)	11.84	10.83	5.574E-04	.0344	6.808E-04	.0420	7.644E-04	.0472	9.093E-04
NOS 8534(113)	11.84	10.83	5.574E-04	.0344	6.808E-04	.0420	7.644E-04	.0472	9.093E-04
TOP 6962(113)	12.91	11.90	5.316E-04	.0328	6.493E-04	.0401	7.291E-04	.0450	8.676E-04
OS 1962(113)	12.91	11.90	5.316E-04	.0328	6.493E-04	.0401	7.291E-04	.0450	8.676E-04
BOT 4035(113)	12.91	11.90	5.316E-04	.0328	6.493E-04	.0401	7.291E-04	.0450	8.676E-04
NOS 8535(113)	12.94	11.93	5.310E-04	.0328	6.486E-04	.0400	7.283E-04	.0450	8.663E-04
TOP 6963(113)	14.02	13.00	5.086E-04	.0314	6.212E-04	.0384	6.975E-04	.0431	8.301E-04
OS 1963(113)	14.02	13.00	5.086E-04	.0314	6.212E-04	.0384	6.975E-04	.0431	8.301E-04
BOT 4036(113)	14.02	13.00	5.086E-04	.0314	6.212E-04	.0384	6.975E-04	.0431	8.301E-04
NOS 8536(113)	14.02	13.00	5.086E-04	.0314	6.212E-04	.0384	6.975E-04	.0431	8.301E-04
TOP 6964(113)	15.09	14.08	4.888E-04	.0302	5.970E-04	.0369	6.703E-04	.0414	7.973E-04
OS 1964(113)	15.09	14.08	4.888E-04	.0302	5.970E-04	.0369	6.703E-04	.0414	7.973E-04
BOT 4037(113)	15.09	14.08	4.888E-04	.0302	5.970E-04	.0369	6.703E-04	.0414	7.973E-04
NOS 8537(113)	15.09	14.08	4.888E-04	.0302	5.970E-04	.0369	6.703E-04	.0414	7.973E-04

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NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
34	0	7.94	211.1	1271	30.00	-.01	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.4	.023	1.002	3760	2.040E-05	7.520E-08	1.020E 06	1.620E-02	2.663E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	83	.0486	4.121E-02	3.7737E-02
OP SIDE(OS)	7687	113	83	.0486	4.121E-02	3.7737E-02
BOTTOM(BOT)	8058	113	83	.0486	4.121E-02	3.7737E-02
TOP(TOP)	8039	113	83	.0486	4.121E-02	3.7737E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6965(113)	16.19	15.18	4.707E-04	.0291	5.749E-04	.0355	6.456E-04	.0399	7.678E-04
OS 1965(113)	16.19	15.18	4.707E-04	.0291	5.749E-04	.0355	6.456E-04	.0399	7.678E-04
BOT 4038(113)	16.19	15.18	4.707E-04	.0291	5.749E-04	.0355	6.456E-04	.0399	7.678E-04
NOS 8538(113)	16.19	15.18	4.707E-04	.0291	5.749E-04	.0355	6.456E-04	.0399	7.678E-04
TOP 6966(113)	17.27	16.26	4.548E-04	.0281	5.555E-04	.0343	6.238E-04	.0385	7.423E-04
OS 1966(113)	17.27	16.26	4.548E-04	.0281	5.555E-04	.0343	6.238E-04	.0385	7.423E-04
BOT 4039(113)	17.27	16.26	4.548E-04	.0281	5.555E-04	.0343	6.238E-04	.0385	7.423E-04
NOS 8539(113)	17.27	16.26	4.548E-04	.0281	5.555E-04	.0343	6.238E-04	.0385	7.423E-04
BOT 4040(113)	18.35	17.33	4.405E-04	.0272	5.380E-04	.0332	6.041E-04	.0373	7.189E-04
TOP 6967(113)	18.37	17.36	4.402E-04	.0272	5.376E-04	.0332	6.037E-04	.0373	7.180E-04
OS 1967(113)	18.37	17.36	4.402E-04	.0272	5.376E-04	.0332	6.037E-04	.0373	7.180E-04
NOS 8540(113)	18.37	17.36	4.402E-04	.0272	5.376E-04	.0332	6.037E-04	.0373	7.180E-04
TOP 6968(113)	19.45	18.44	4.271E-04	.0264	5.217E-04	.0322	5.858E-04	.0362	6.974E-04
OS 1968(113)	19.45	18.44	4.271E-04	.0264	5.217E-04	.0322	5.858E-04	.0362	6.974E-04
BOT 4041(113)	19.45	18.44	4.271E-04	.0264	5.217E-04	.0322	5.858E-04	.0362	6.974E-04
NOS 8541(113)	19.45	18.44	4.271E-04	.0264	5.217E-04	.0322	5.858E-04	.0362	6.974E-04
TOP 6969(113)	20.52	19.51	4.152E-04	.0256	5.071E-04	.0313	5.694E-04	.0352	6.773E-04
OS 1969(113)	20.52	19.51	4.152E-04	.0256	5.071E-04	.0313	5.694E-04	.0352	6.773E-04
BOT 4042(113)	20.52	19.51	4.152E-04	.0256	5.071E-04	.0313	5.694E-04	.0352	6.773E-04
NOS 8542(113)	20.55	19.54	4.149E-04	.0256	5.068E-04	.0313	5.691E-04	.0351	6.772E-04
TOP 6970(113)	21.62	20.61	4.040E-04	.0249	4.934E-04	.0305	5.540E-04	.0342	6.587E-04
OS 1970(113)	21.62	20.61	4.040E-04	.0249	4.934E-04	.0305	5.540E-04	.0342	6.587E-04
BOT 4043(113)	21.62	20.61	4.040E-04	.0249	4.934E-04	.0305	5.540E-04	.0342	6.587E-04
NOS 8543(113)	21.62	20.61	4.040E-04	.0249	4.934E-04	.0305	5.540E-04	.0342	6.587E-04
TOP 6971(113)	22.70	21.69	3.938E-04	.0243	4.810E-04	.0297	5.401E-04	.0334	6.427E-04
OS 1971(113)	22.70	21.69	3.938E-04	.0243	4.810E-04	.0297	5.401E-04	.0334	6.427E-04
BOT 4044(113)	22.70	21.69	3.938E-04	.0243	4.810E-04	.0297	5.401E-04	.0334	6.427E-04
NOS 8544(113)	22.70	21.69	3.938E-04	.0243	4.810E-04	.0297	5.401E-04	.0334	6.427E-04

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NASA-RI OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
34	0	7.94	211.0	1271	30.00	-.01	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.4	.023	1.002	3760	2.039E-05	7.519E-08	1.020E 06	1.619E-02	2.664E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	83	.0486	4.121E-02	3.7737E-02
OP SIDE(OS)	7687	113	83	.0486	4.121E-02	3.7737E-02
BOTTOM(BOT)	8058	113	83	.0486	4.121E-02	3.7737E-02
TOP(TOP)	8039	113	83	.0486	4.121E-02	3.7737E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6972(113)	23.80	22.79	3.842E-04	.0237	4.692E-04	.0290	5.269E-04	.0325	6.267E-04
OS 1972(113)	23.80	22.79	3.842E-04	.0237	4.692E-04	.0290	5.269E-04	.0325	6.267E-04
BOT 4045(113)	23.80	22.79	3.842E-04	.0237	4.692E-04	.0290	5.269E-04	.0325	6.267E-04
NOS 8545(113)	23.80	22.79	3.842E-04	.0237	4.692E-04	.0290	5.269E-04	.0325	6.267E-04
TOP 6973(113)	24.88	23.87	3.754E-04	.0232	4.585E-04	.0283	5.149E-04	.0318	6.130E-04
BOT 4046(113)	24.88	23.87	3.754E-04	.0232	4.585E-04	.0283	5.149E-04	.0318	6.130E-04
NOS 8546(113)	24.88	23.87	3.754E-04	.0232	4.585E-04	.0283	5.149E-04	.0318	6.130E-04
OS 1973(113)	24.90	23.89	3.752E-04	.0232	4.583E-04	.0283	5.146E-04	.0318	6.126E-04
TOP 6974(113)	25.98	24.97	3.670E-04	.0227	4.483E-04	.0277	5.034E-04	.0311	5.990E-04
OS 1974(113)	25.98	24.97	3.670E-04	.0227	4.483E-04	.0277	5.034E-04	.0311	5.990E-04
BOT 4047(113)	25.98	24.97	3.670E-04	.0227	4.483E-04	.0277	5.034E-04	.0311	5.990E-04
NOS 8547(113)	25.98	24.97	3.670E-04	.0227	4.483E-04	.0277	5.034E-04	.0311	5.990E-04
TOP 6975(113)	27.06	26.04	3.594E-04	.0222	4.389E-04	.0271	4.929E-04	.0304	5.862E-04
OS 1975(113)	27.06	26.04	3.594E-04	.0222	4.389E-04	.0271	4.929E-04	.0304	5.862E-04
BOT 4048(113)	27.06	26.04	3.594E-04	.0222	4.389E-04	.0271	4.929E-04	.0304	5.862E-04
NOS 8548(113)	27.06	26.04	3.594E-04	.0222	4.389E-04	.0271	4.929E-04	.0304	5.862E-04
BOT 4049(113)	28.13	27.12	3.522E-04	.0217	4.301E-04	.0266	4.830E-04	.0298	5.747E-04
TOP 6976(113)	28.16	27.15	3.520E-04	.0217	4.299E-04	.0265	4.828E-04	.0298	5.742E-04
OS 1976(113)	28.16	27.15	3.520E-04	.0217	4.299E-04	.0265	4.828E-04	.0298	5.742E-04
NOS 8549(113)	28.16	27.15	3.520E-04	.0217	4.299E-04	.0265	4.828E-04	.0298	5.742E-04
TOP 6977(113)	29.23	28.22	3.452E-04	.0213	4.217E-04	.0260	4.735E-04	.0292	5.634E-04
OS 1977(113)	29.23	28.22	3.452E-04	.0213	4.217E-04	.0260	4.735E-04	.0292	5.634E-04
BOT 4050(113)	29.23	28.22	3.452E-04	.0213	4.217E-04	.0260	4.735E-04	.0292	5.634E-04
NOS 8550(113)	29.23	28.22	3.452E-04	.0213	4.217E-04	.0260	4.735E-04	.0292	5.634E-04
TOP 6978(113)	30.31	29.30	3.388E-04	.0209	4.138E-04	.0256	4.647E-04	.0287	5.530E-04
OS 1978(113)	30.31	29.30	3.388E-04	.0209	4.138E-04	.0256	4.647E-04	.0287	5.530E-04
BOT 4051(113)	30.31	29.30	3.388E-04	.0209	4.138E-04	.0256	4.647E-04	.0287	5.530E-04
NOS 8551(113)	30.31	29.30	3.388E-04	.0209	4.138E-04	.0256	4.647E-04	.0287	5.530E-04

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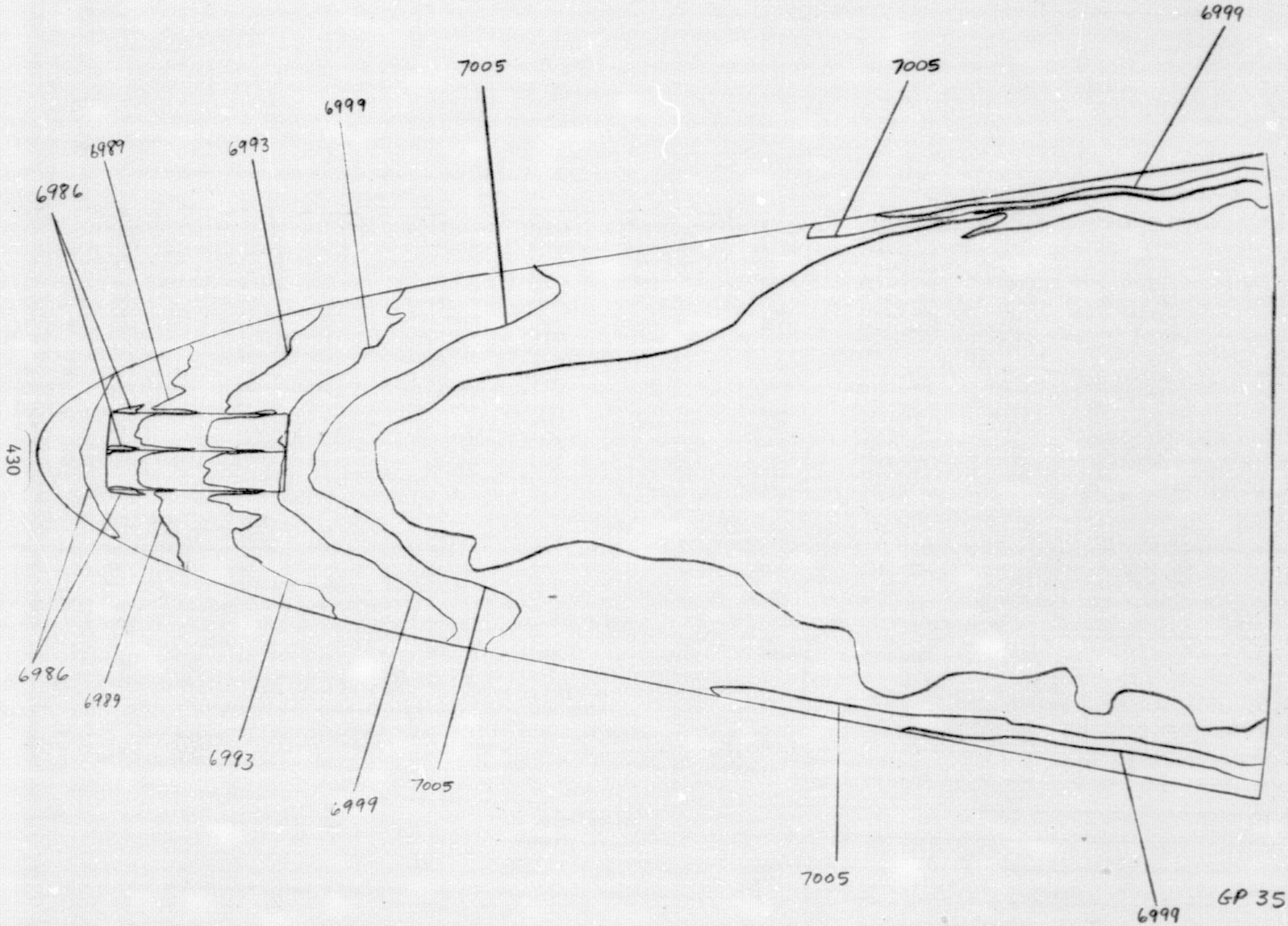
NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

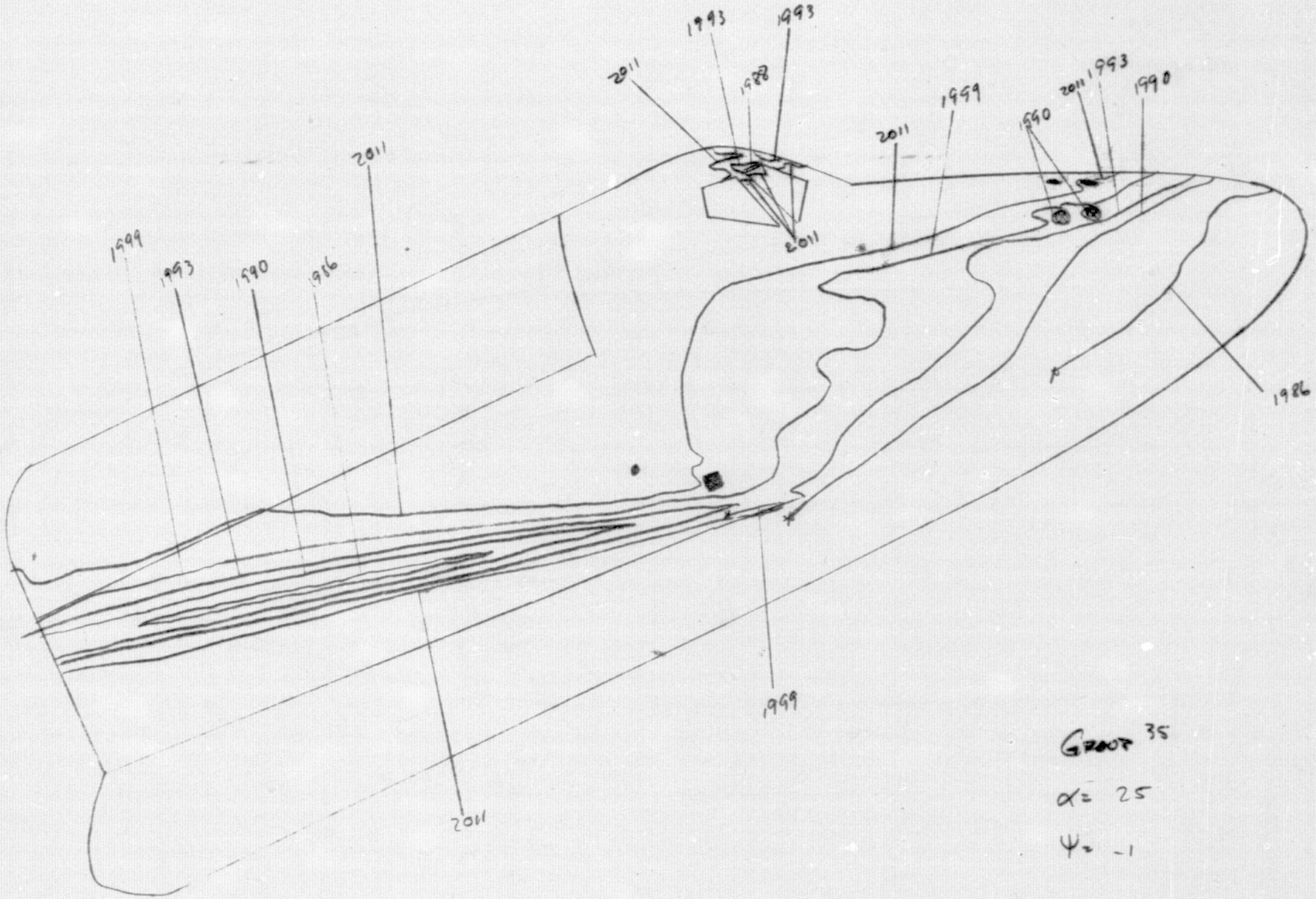
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
34	0	7.94	211.0	1271	30.00	-.01	30.00	-2.00	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.4	.023	1.002	3760	2.039E-05	7.519E-08	1.020E 06	1.619E-02	2.664E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	83	.0486	4.121E-02	3.7737E-02
OP SIDE(OS)	7687	113	83	.0486	4.121E-02	3.7737E-02
BOTTOM(BOT)	8056	113	83	.0486	4.121E-02	3.7737E-02
TOP(TOP)	8039	113	83	.0486	4.121E-02	3.7737E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 6979(113)	31.41	30.40	3.326E-04	.0205	4.063E-04	.0251	4.562E-04	.0282	5.431E-04
OS 1979(113)	31.41	30.40	3.326E-04	.0205	4.063E-04	.0251	4.562E-04	.0282	5.431E-04
BOT 4052(113)	31.41	30.40	3.326E-04	.0205	4.063E-04	.0251	4.562E-04	.0282	5.431E-04
NOS 8552(113)	31.41	30.40	3.326E-04	.0205	4.063E-04	.0251	4.562E-04	.0282	5.431E-04
TOP 6980(113)	32.49	31.48	3.269E-04	.0202	3.993E-04	.0246	4.483E-04	.0277	5.330E-04
OS 1980(113)	32.49	31.48	3.269E-04	.0202	3.993E-04	.0246	4.483E-04	.0277	5.330E-04
BOT 4053(113)	32.49	31.48	3.269E-04	.0202	3.993E-04	.0246	4.483E-04	.0277	5.330E-04
NOS 8553(113)	32.49	31.48	3.269E-04	.0202	3.993E-04	.0246	4.483E-04	.0277	5.330E-04
	32.81		MODEL HAS LEFT CENTERLINE						
BOT 4054(113)	33.56	32.55	3.215E-04	.0198	3.926E-04	.0242	4.409E-04	.0272	5.246E-04
TOP 6981(113)	33.59	32.58	3.213E-04	.0198	3.925E-04	.0242	4.407E-04	.0272	5.242E-04
OS 1981(113)	33.59	32.58	3.213E-04	.0198	3.925E-04	.0242	4.407E-04	.0272	5.242E-04
NOS 8554(113)	33.59	32.58	3.213E-04	.0198	3.925E-04	.0242	4.407E-04	.0272	5.242E-04
TOP 6982(113)	34.66	33.65	3.161E-04	.0195	3.861E-04	.0238	4.336E-04	.0268	5.157E-04
OS 1982(113)	34.66	33.65	3.161E-04	.0195	3.861E-04	.0238	4.336E-04	.0268	5.157E-04
BOT 4055(113)	34.66	33.65	3.161E-04	.0195	3.861E-04	.0238	4.336E-04	.0268	5.157E-04
NOS 8555(113)	34.66	33.65	3.161E-04	.0195	3.861E-04	.0238	4.336E-04	.0268	5.157E-04

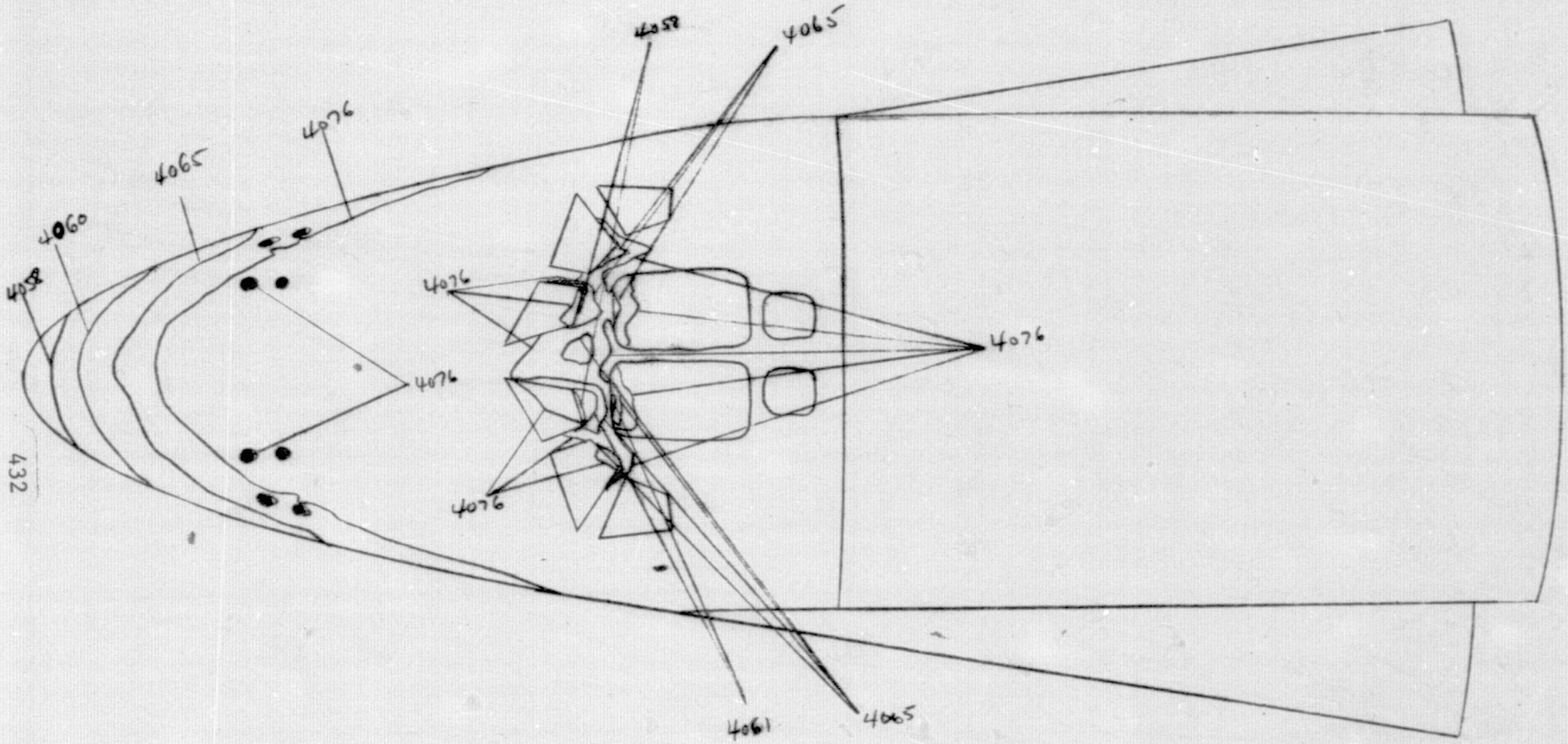

6999
7005
7005
6999
6989
6993
6986
430
6986
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GP 35



GROUP 35

$\alpha = 25$

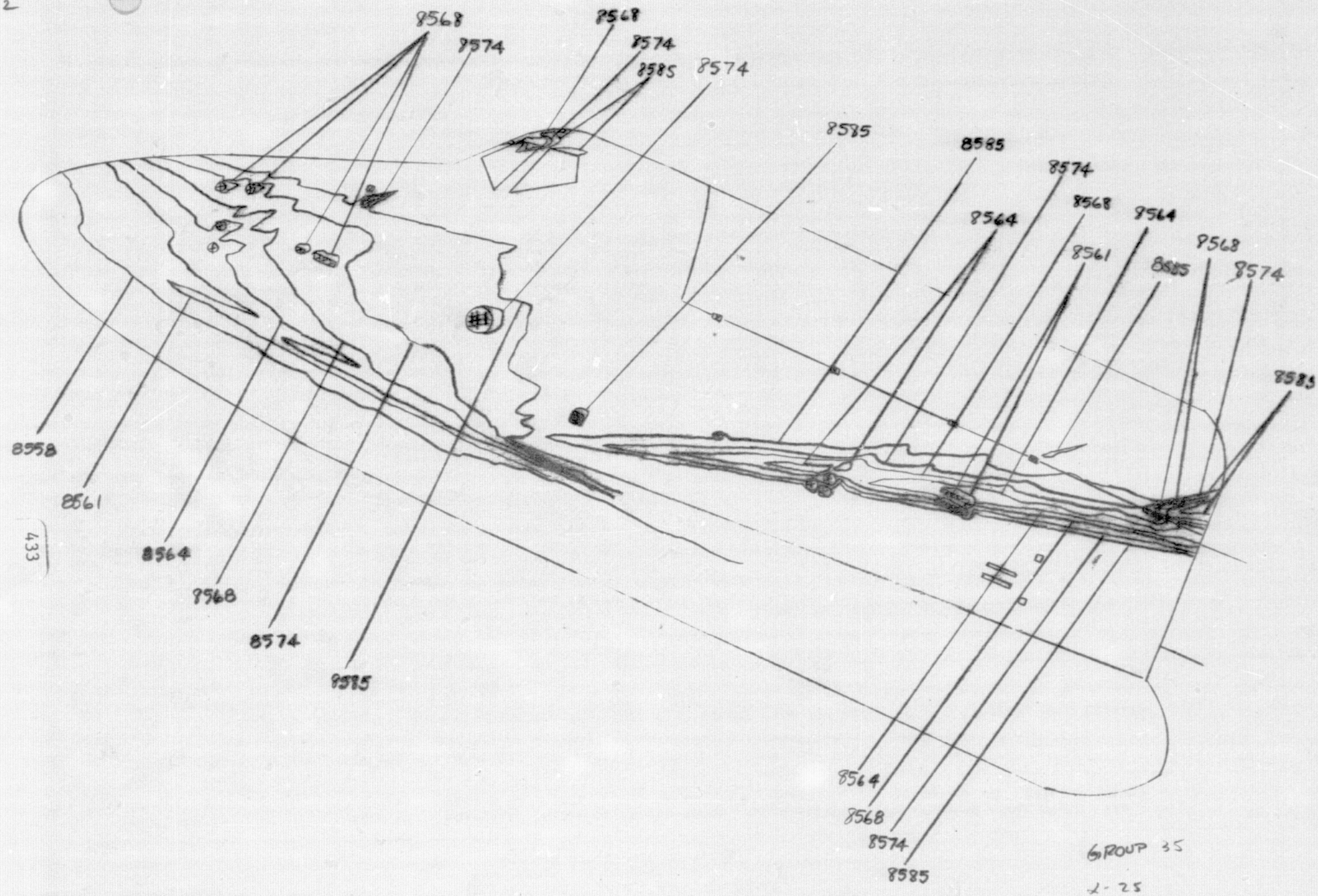
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GROUP 35

$\alpha = 25$

$\psi_2 = -1$



433

GROUP 35

L-25

4=-1

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

4/10/74

NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
35	0	7.94	210.9	1270	24.99	4.99	30.00	2.37	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	1.001	3758	2.040E-05	7.513E-08	1.020E 06	1.619E-02	2.663E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7623	113	82	.0486	0	0
OP SIDE(OS)	7687	113	82	.0486	0	0
BOTTOM(BOT)	8058	113	82	.0486	0	0
TOP(TOP)	8039	175	82	.0518	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TO 6983(175)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 1983(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
BO 4056(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 8556(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 1984(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 4057(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
TO 6984(175)	1.13		MODEL HAS NOT REACHED CENTERLINE						
NO 8557(113)	1.13		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.75								
OS 1985(113)	2.18	1.19	1.737E-03	.1072	2.119E-03	.1308	2.381E-03	.1470	2.833E-03
BOT 4058(113)	2.18	1.19	1.737E-03	.1072	2.119E-03	.1308	2.381E-03	.1470	2.833E-03
TOP 6985(175)	2.20	1.22	5.913E-03	.3650	7.341E-03	.4532	8.353E-03	.5156	9.606E-03
NOS 8558(113)	2.20	1.22	1.719E-03	.1061	2.097E-03	.1294	2.356E-03	.1455	2.802E-03
OS 1986(113)	3.25	2.27	1.260E-03	.0777	1.537E-03	.0948	1.727E-03	.1065	2.051E-03
TOP 6986(175)	3.28	2.30	4.309E-03	.2659	5.350E-03	.3302	6.088E-03	.3757	6.997E-03
BOT 4059(113)	3.28	2.30	1.253E-03	.0773	1.528E-03	.0943	1.717E-03	.1060	2.041E-03
NOS 8559(113)	3.28	2.30	1.253E-03	.0773	1.528E-03	.0943	1.717E-03	.1060	2.041E-03
TOP 6987(175)	4.36	3.37	3.555E-03	.2194	4.414E-03	.2724	5.023E-03	.3100	5.773E-03
OS 1987(113)	4.36	3.37	1.034E-03	.0638	1.261E-03	.0778	1.417E-03	.0874	1.684E-03
BOT 4060(113)	4.36	3.37	1.034E-03	.0638	1.261E-03	.0778	1.417E-03	.0874	1.684E-03
NOS 8560(113)	4.36	3.37	1.034E-03	.0638	1.261E-03	.0778	1.417E-03	.0874	1.684E-03
TOP 6988(175)	5.43	4.45	3.096E-03	.1909	3.843E-03	.2371	4.373E-03	.2697	5.022E-03
OS 1988(113)	5.43	4.45	9.000E-04	.0555	1.098E-03	.0677	1.234E-03	.0761	1.465E-03
BOT 4061(113)	5.43	4.45	9.000E-04	.0555	1.098E-03	.0677	1.234E-03	.0761	1.465E-03
NOS 8561(113)	5.43	4.45	9.000E-04	.0555	1.098E-03	.0677	1.234E-03	.0761	1.465E-03
BOT 4062(113)	6.51	5.52	8.075E-04	.0498	9.658E-04	.0697	1.107E-03	.0683	1.314E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

NASA-RI OH60 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
35	0	7.94	211.6	1278	24.99	4.99	30.00	2.37	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	1.005	3759	2.046E-05	7.515E-08	1.023E 06	1.622E-02	2.659E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	82	.0486	4.257E-02	3.9053E-02
OP SIDE(OS)	7687	113	82	.0486	4.257E-02	3.9053E-02
BOTTOM(BOT)	8058	113	82	.0486	4.257E-02	3.9053E-02
TOP(TOP)	8039	175	82	.0518	1.277E-01	1.2603E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 6989(175)	6.53	5.55	2.771E-03	.1709	3.441E-03	.2122	3.915E-03	.2414	4.494E-03
OS 1989(113)	6.53	5.55	8.057E-04	.0497	9.828E-04	.0606	1.104E-03	.0681	1.311E-03
NOS 8562(113)	6.53	5.55	8.057E-04	.0497	9.828E-04	.0606	1.104E-03	.0681	1.311E-03
TOP 6990(175)	7.61	6.63	2.536E-03	.1564	3.149E-03	.1942	3.583E-03	.2210	4.115E-03
OS 1990(113)	7.61	6.63	7.374E-04	.0455	8.994E-04	.0555	1.011E-03	.0623	1.200E-03
BOT 4063(113)	7.61	6.63	7.374E-04	.0455	8.994E-04	.0555	1.011E-03	.0623	1.200E-03
NOS 8563(113)	7.61	6.63	7.374E-04	.0455	8.994E-04	.0555	1.011E-03	.0623	1.200E-03
TOP 6991(175)	8.68	7.70	2.352E-03	.1451	2.921E-03	.1802	3.323E-03	.2050	3.816E-03
OS 1991(113)	8.68	7.70	6.839E-04	.0422	8.342E-04	.0515	9.374E-04	.0578	1.113E-03
BOT 4064(113)	8.68	7.70	6.839E-04	.0422	8.342E-04	.0515	9.374E-04	.0578	1.113E-03
NOS 8564(113)	8.68	7.70	6.839E-04	.0422	8.342E-04	.0515	9.374E-04	.0578	1.113E-03
OS 1992(113)	9.76	8.78	6.406E-04	.0395	7.814E-04	.0482	8.781E-04	.0541	1.042E-03
TOP 6992(175)	9.79	8.80	2.200E-03	.1357	2.732E-03	.1684	3.108E-03	.1916	3.566E-03
BOT 4065(113)	9.79	8.80	6.397E-04	.0394	7.803E-04	.0481	8.768E-04	.0541	1.040E-03
NOS 8565(113)	9.79	8.80	6.397E-04	.0394	7.803E-04	.0481	8.768E-04	.0541	1.040E-03
TOP 6993(175)	10.86	9.88	2.077E-03	.1281	2.579E-03	.1590	2.934E-03	.1809	3.366E-03
OS 1993(113)	10.86	9.88	6.039E-04	.0372	7.366E-04	.0454	8.277E-04	.0510	9.820E-04
BOT 4066(113)	10.86	9.88	6.039E-04	.0372	7.366E-04	.0454	8.277E-04	.0510	9.820E-04
NOS 8566(113)	10.86	9.88	6.039E-04	.0372	7.366E-04	.0454	8.277E-04	.0510	9.820E-04
BOT 4067(113)	11.94	10.96	5.734E-04	.0354	6.995E-04	.0431	7.860E-04	.0485	9.325E-04
TOP 6994(175)	11.96	10.98	1.970E-03	.1215	2.446E-03	.1508	2.783E-03	.1716	3.193E-03
OS 1994(113)	11.96	10.98	5.728E-04	.0353	6.987E-04	.0431	7.851E-04	.0484	9.315E-04
NOS 8567(113)	11.96	10.98	5.728E-04	.0353	6.987E-04	.0431	7.851E-04	.0484	9.315E-04
TOP 6995(175)	13.04	12.06	1.880E-03	.1159	2.334E-03	.1439	2.656E-03	.1637	3.046E-03
OS 1995(113)	13.04	12.06	5.466E-04	.0337	6.667E-04	.0411	7.492E-04	.0462	8.885E-04
BOT 4068(113)	13.04	12.06	5.466E-04	.0337	6.667E-04	.0411	7.492E-04	.0462	8.885E-04
NOS 8568(113)	13.04	12.06	5.466E-04	.0337	6.667E-04	.0411	7.492E-04	.0462	8.885E-04

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
35	0	7.94	211.8	1270	24.99	4.99	30.00	2.37	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	1.005	3759	2.048E-05	7.514E-08	1.025E 06	1.622E-02	2.658E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7823	113	82	.0486	4.257E-02	3.9053E-02
UP SIDE(US)	7687	113	82	.0486	4.257E-02	3.9053E-02
BOTTOM(BOT)	8058	113	82	.0486	4.257E-02	3.9053E-02
TOP(TOP)	8039	175	82	.0518	1.277E-01	1.2603E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
BOT 4069(113)	14.12	13.13	5.237E-04	.0323	6.388E-04	.0394	7.179E-04	.0443	8.513E-04
TOP 6996(175)	14.14	13.16	1.800E-03	.1109	2.234E-03	.1377	2.543E-03	.1567	2.915E-03
OS 1996(113)	14.14	13.16	5.232E-04	.0323	6.382E-04	.0393	7.172E-04	.0442	8.505E-04
NOS 8569(113)	14.14	13.16	5.232E-04	.0323	6.382E-04	.0393	7.172E-04	.0442	8.505E-04
TOP 6997(175)	15.22	14.23	1.730E-03	.1067	2.148E-03	.1324	2.444E-03	.1507	2.803E-03
OS 1997(113)	15.22	14.23	5.031E-04	.0310	6.136E-04	.0378	6.896E-04	.0425	8.177E-04
BOT 4070(113)	15.22	14.23	5.031E-04	.0310	6.136E-04	.0378	6.896E-04	.0425	8.177E-04
NOS 8570(113)	15.22	14.23	5.031E-04	.0310	6.136E-04	.0378	6.896E-04	.0425	8.177E-04
TOP 6998(175)	16.29	15.31	1.668E-03	.1028	2.071E-03	.1276	2.357E-03	.1452	2.699E-03
OS 1998(113)	16.29	15.31	4.851E-04	.0299	5.917E-04	.0364	6.649E-04	.0410	7.873E-04
BOT 4071(113)	16.29	15.31	4.851E-04	.0299	5.917E-04	.0364	6.649E-04	.0410	7.873E-04
NOS 8571(113)	16.29	15.31	4.851E-04	.0299	5.917E-04	.0364	6.649E-04	.0410	7.873E-04
TOP 6999(175)	17.40	16.41	1.611E-03	.0993	2.001E-03	.1233	2.277E-03	.1403	2.608E-03
OS 1999(113)	17.40	16.41	4.685E-04	.0289	5.715E-04	.0352	6.422E-04	.0396	7.608E-04
BOT 4072(113)	17.40	16.41	4.685E-04	.0289	5.715E-04	.0352	6.422E-04	.0396	7.608E-04
NOS 8572(113)	17.40	16.41	4.685E-04	.0289	5.715E-04	.0352	6.422E-04	.0396	7.608E-04
TOP 7000(175)	18.47	17.49	1.561E-03	.0962	1.938E-03	.1194	2.205E-03	.1359	2.527E-03
OS 2000(113)	18.47	17.49	4.539E-04	.0280	5.536E-04	.0341	6.221E-04	.0383	7.370E-04
BOT 4073(113)	18.47	17.49	4.539E-04	.0280	5.536E-04	.0341	6.221E-04	.0383	7.370E-04
NOS 8573(113)	18.47	17.49	4.539E-04	.0280	5.536E-04	.0341	6.221E-04	.0383	7.370E-04
BOT 4074(113)	19.55	18.56	4.405E-04	.0271	5.373E-04	.0331	6.038E-04	.0372	7.150E-04
TOP 7001(175)	19.57	18.59	1.514E-03	.0933	1.880E-03	.1158	2.139E-03	.1318	2.449E-03
OS 2001(113)	19.57	18.59	4.402E-04	.0271	5.370E-04	.0331	6.034E-04	.0372	7.145E-04
NOS 8574(113)	19.57	18.59	4.402E-04	.0271	5.370E-04	.0331	6.034E-04	.0372	7.145E-04
TOP 7002(175)	20.65	19.67	1.472E-03	.0907	1.828E-03	.1126	2.080E-03	.1281	2.380E-03
OS 2002(113)	20.65	19.67	4.280E-04	.0264	5.221E-04	.0321	5.867E-04	.0361	6.944E-04
BOT 4075(113)	20.65	19.67	4.280E-04	.0264	5.221E-04	.0321	5.867E-04	.0361	6.944E-04
NOS 8575(113)	20.65	19.67	4.280E-04	.0264	5.221E-04	.0321	5.867E-04	.0361	6.944E-04

4/10/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
35	0	7.94	212.2	1270	24.99	4.99	30.00	2.37	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	1.007	3759	2.052E-05	7.514E-08	1.026E 06	1.624E-02	2.655E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7823	113	82	.0486	4.257E-02	3.9053E-02
OP SIDE(OS)	7687	113	82	.0486	4.257E-02	3.9053E-02
BOTTOM(BOT)	8058	113	82	.0486	4.257E-02	3.9053E-02
TOP(TOP)	8039	175	82	.0518	1.277E-01	1.2603E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 7003(175)	21.72	20.74	1.433E-03	.0883	1.780E-03	.1096	2.025E-03	.1248	2.320E-03
OS 2003(113)	21.72	20.74	4.167E-04	.0257	5.083E-04	.0313	5.712E-04	.0352	6.768E-04
BOT 4076(113)	21.72	20.74	4.167E-04	.0257	5.083E-04	.0313	5.712E-04	.0352	6.768E-04
NOS 8576(113)	21.72	20.74	4.167E-04	.0257	5.083E-04	.0313	5.712E-04	.0352	6.768E-04
TOP 7004(175)	22.83	21.84	1.397E-03	.0860	1.734E-03	.1068	1.973E-03	.1215	2.259E-03
OS 2004(113)	22.83	21.84	4.061E-04	.0250	4.954E-04	.0305	5.566E-04	.0343	6.588E-04
BOT 4077(113)	22.83	21.84	4.061E-04	.0250	4.954E-04	.0305	5.566E-04	.0343	6.588E-04
NOS 8577(113)	22.83	21.84	4.061E-04	.0250	4.954E-04	.0305	5.566E-04	.0343	6.588E-04
TOP 7005(175)	23.90	22.92	1.364E-03	.0840	1.693E-03	.1043	1.926E-03	.1187	2.206E-03
OS 2005(113)	23.90	22.92	3.965E-04	.0244	4.836E-04	.0298	5.434E-04	.0335	6.435E-04
BOT 4078(113)	23.90	22.92	3.965E-04	.0244	4.836E-04	.0298	5.434E-04	.0335	6.435E-04
NOS 8578(113)	23.90	22.92	3.965E-04	.0244	4.836E-04	.0298	5.434E-04	.0335	6.435E-04
BOT 4079(113)	24.98	24.00	3.875E-04	.0239	4.726E-04	.0291	5.311E-04	.0327	6.283E-04
TOP 7006(175)	25.00	24.02	1.332E-03	.0820	1.654E-03	.1018	1.882E-03	.1159	2.154E-03
OS 2006(113)	25.00	24.02	3.873E-04	.0238	4.724E-04	.0291	5.308E-04	.0327	6.283E-04
NOS 8579(113)	25.00	24.02	3.873E-04	.0238	4.724E-04	.0291	5.308E-04	.0327	6.283E-04
TOP 7007(175)	26.08	25.10	1.303E-03	.0802	1.618E-03	.0996	1.841E-03	.1133	2.106E-03
OS 2007(113)	26.08	25.10	3.789E-04	.0233	4.621E-04	.0285	5.193E-04	.0320	6.144E-04
BOT 4080(113)	26.08	25.10	3.789E-04	.0233	4.621E-04	.0285	5.193E-04	.0320	6.144E-04
NOS 8580(113)	26.08	25.10	3.789E-04	.0233	4.621E-04	.0285	5.193E-04	.0320	6.144E-04
TOP 7008(175)	27.16	26.17	1.276E-03	.0785	1.584E-03	.0975	1.803E-03	.1110	2.061E-03
OS 2008(113)	27.16	26.17	3.710E-04	.0228	4.525E-04	.0279	5.085E-04	.0313	6.013E-04
BOT 4081(113)	27.16	26.17	3.710E-04	.0228	4.525E-04	.0279	5.085E-04	.0313	6.013E-04
NOS 8581(113)	27.16	26.17	3.710E-04	.0228	4.525E-04	.0279	5.085E-04	.0313	6.013E-04
BOT 4082(113)	28.23	27.25	3.636E-04	.0224	4.435E-04	.0273	4.984E-04	.0307	5.891E-04

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4/10/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE

VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

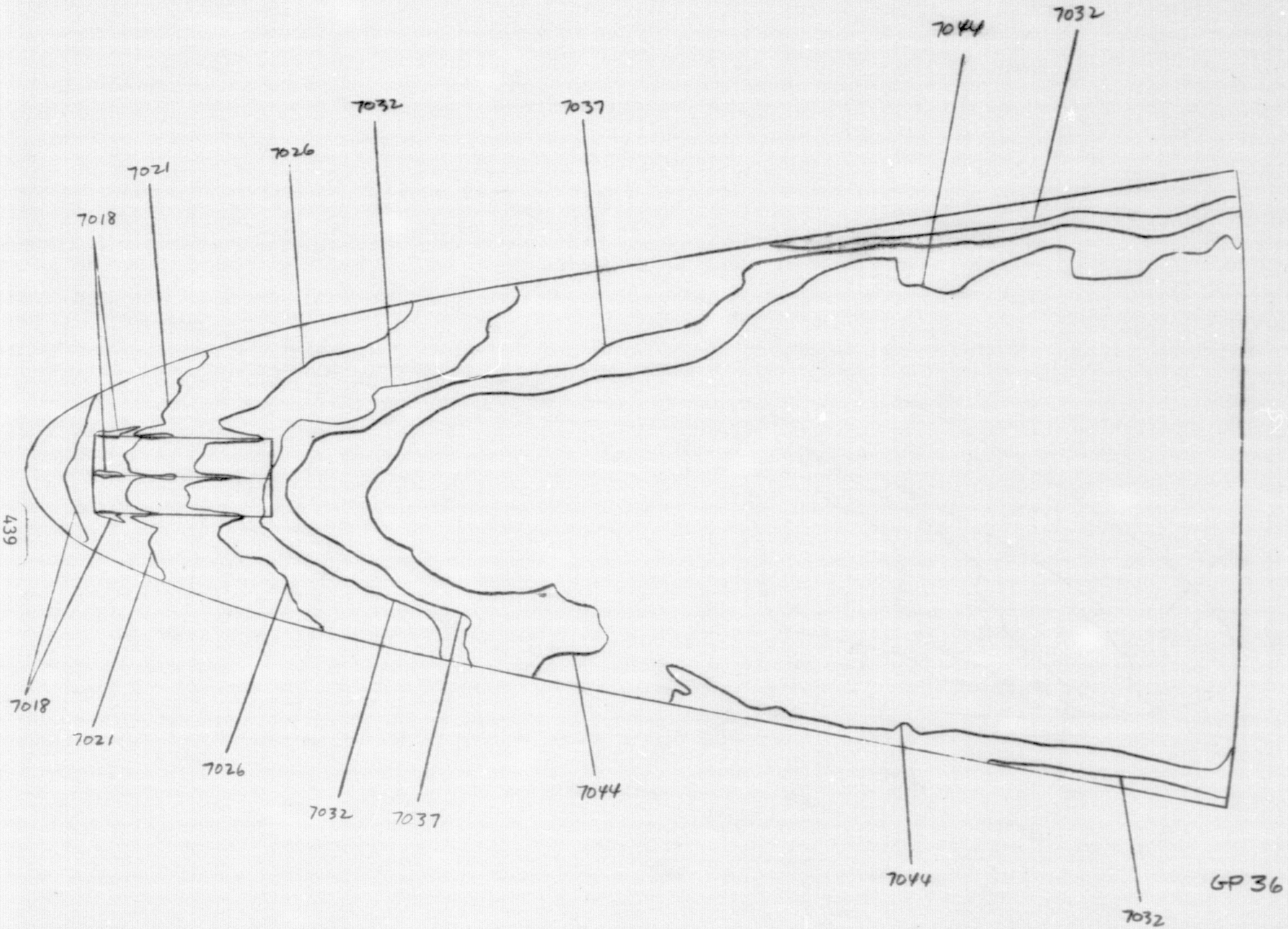
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
35	0	7.94	212.5	1270	24.99	4.99	30.00	2.37	-1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	1.009	3759	2.055E-05	7.514E-08	1.028E 06	1.625E-02	2.653E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7623	113	82	.0486	4.257E-02	3.9053E-02
OP SIDE(OS)	7687	113	82	.0486	4.257E-02	3.9053E-02
BOTTOM(BOT)	8058	113	82	.0486	4.257E-02	3.9053E-02
TOP(TOP)	8039	175	82	.0518	1.277E-01	1.2603E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 7009(175)	28.26	27.27	1.250E-03	.0769	1.552E-03	.0955	1.766E-03	.1087	2.019E-03
OS 2009(113)	28.26	27.27	3.634E-04	.0224	4.433E-04	.0273	4.981E-04	.0307	5.890E-04
NOS 8582(113)	28.26	27.27	3.634E-04	.0224	4.433E-04	.0273	4.981E-04	.0307	5.890E-04
TOP 7010(175)	29.33	28.35	1.226E-03	.0755	1.522E-03	.0937	1.732E-03	.1066	1.981E-03
OS 2010(113)	29.33	28.35	3.565E-04	.0219	4.348E-04	.0268	4.886E-04	.0301	5.778E-04
BOT 4083(113)	29.33	28.35	3.565E-04	.0219	4.348E-04	.0268	4.886E-04	.0301	5.778E-04
NOS 8583(113)	29.33	28.35	3.565E-04	.0219	4.348E-04	.0268	4.886E-04	.0301	5.778E-04
TOP 7011(175)	30.41	29.43	1.203E-03	.0741	1.494E-03	.0919	1.700E-03	.1046	1.943E-03
OS 2011(113)	30.41	29.43	3.499E-04	.0215	4.268E-04	.0263	4.796E-04	.0295	5.668E-04
BOT 4084(113)	30.41	29.43	3.499E-04	.0215	4.268E-04	.0263	4.796E-04	.0295	5.668E-04
NOS 8584(113)	30.41	29.43	3.499E-04	.0215	4.268E-04	.0263	4.796E-04	.0295	5.668E-04
TOP 7012(175)	31.51	30.53	1.182E-03	.0727	1.467E-03	.0903	1.669E-03	.1027	1.907E-03
OS 2012(113)	31.51	30.53	3.435E-04	.0211	4.190E-04	.0258	4.709E-04	.0290	5.563E-04
BOT 4085(113)	31.51	30.53	3.435E-04	.0211	4.190E-04	.0258	4.709E-04	.0290	5.563E-04
NOS 8585(113)	31.51	30.53	3.435E-04	.0211	4.190E-04	.0258	4.709E-04	.0290	5.563E-04
TOP 7013(175)	32.59	31.60	1.161E-03	.0714	1.442E-03	.0887	1.641E-03	.1009	1.874E-03
OS 2013(113)	32.59	31.60	3.376E-04	.0208	4.118E-04	.0253	4.628E-04	.0285	5.467E-04
BOT 4086(113)	32.59	31.60	3.376E-04	.0208	4.118E-04	.0253	4.628E-04	.0285	5.467E-04
NOS 8586(113)	32.59	31.60	3.376E-04	.0208	4.118E-04	.0253	4.628E-04	.0285	5.467E-04
	33.49		MODEL HAS LEFT CENTERLINE						
TOP 7014(175)	33.66	32.68	1.142E-03	.0703	1.418E-03	.0873	1.613E-03	.0993	1.844E-03
OS 2014(113)	33.66	32.68	3.320E-04	.0204	4.050E-04	.0249	4.551E-04	.0280	5.379E-04
BOT 4087(113)	33.69	32.71	3.319E-04	.0204	4.048E-04	.0249	4.549E-04	.0280	5.377E-04
NOS 8587(113)	33.69	32.71	3.319E-04	.0204	4.048E-04	.0249	4.549E-04	.0280	5.377E-04

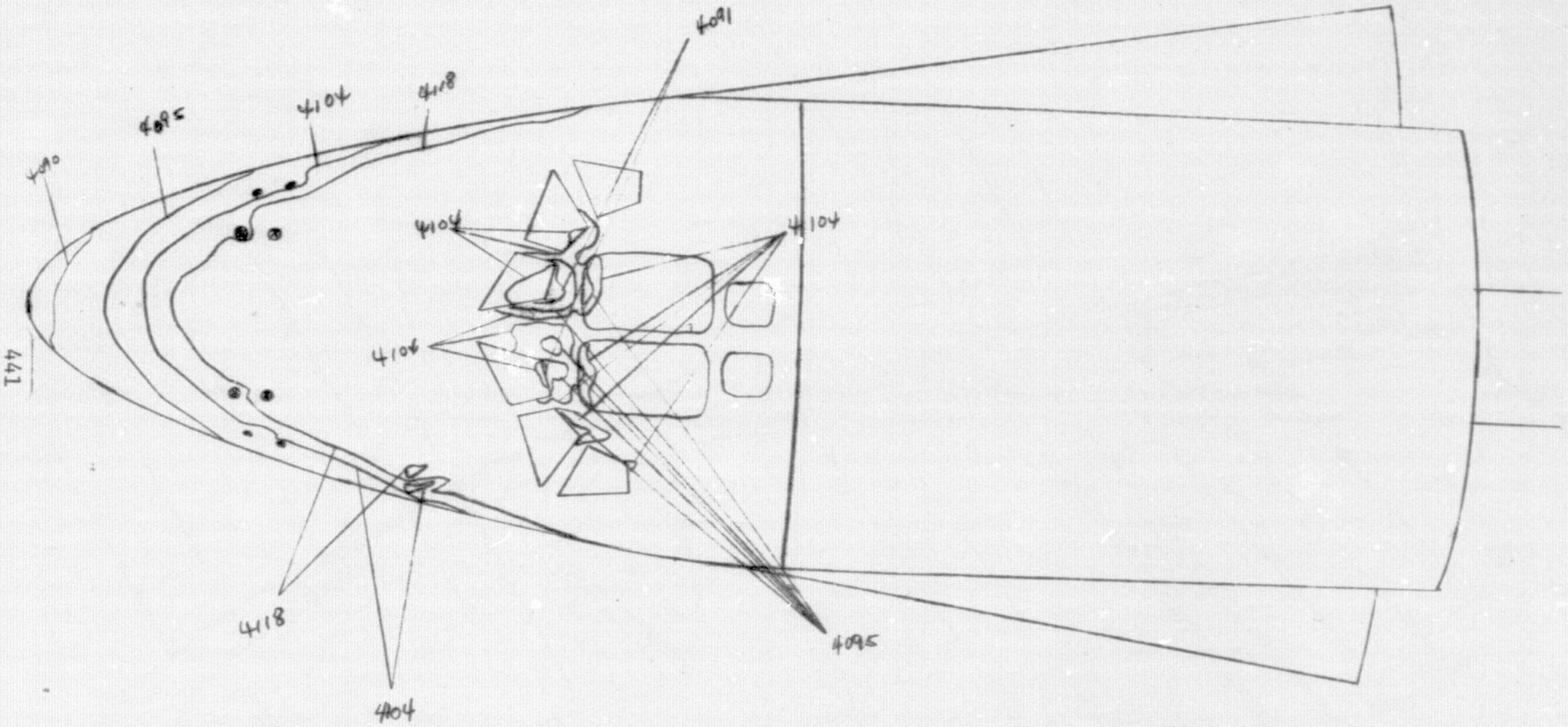
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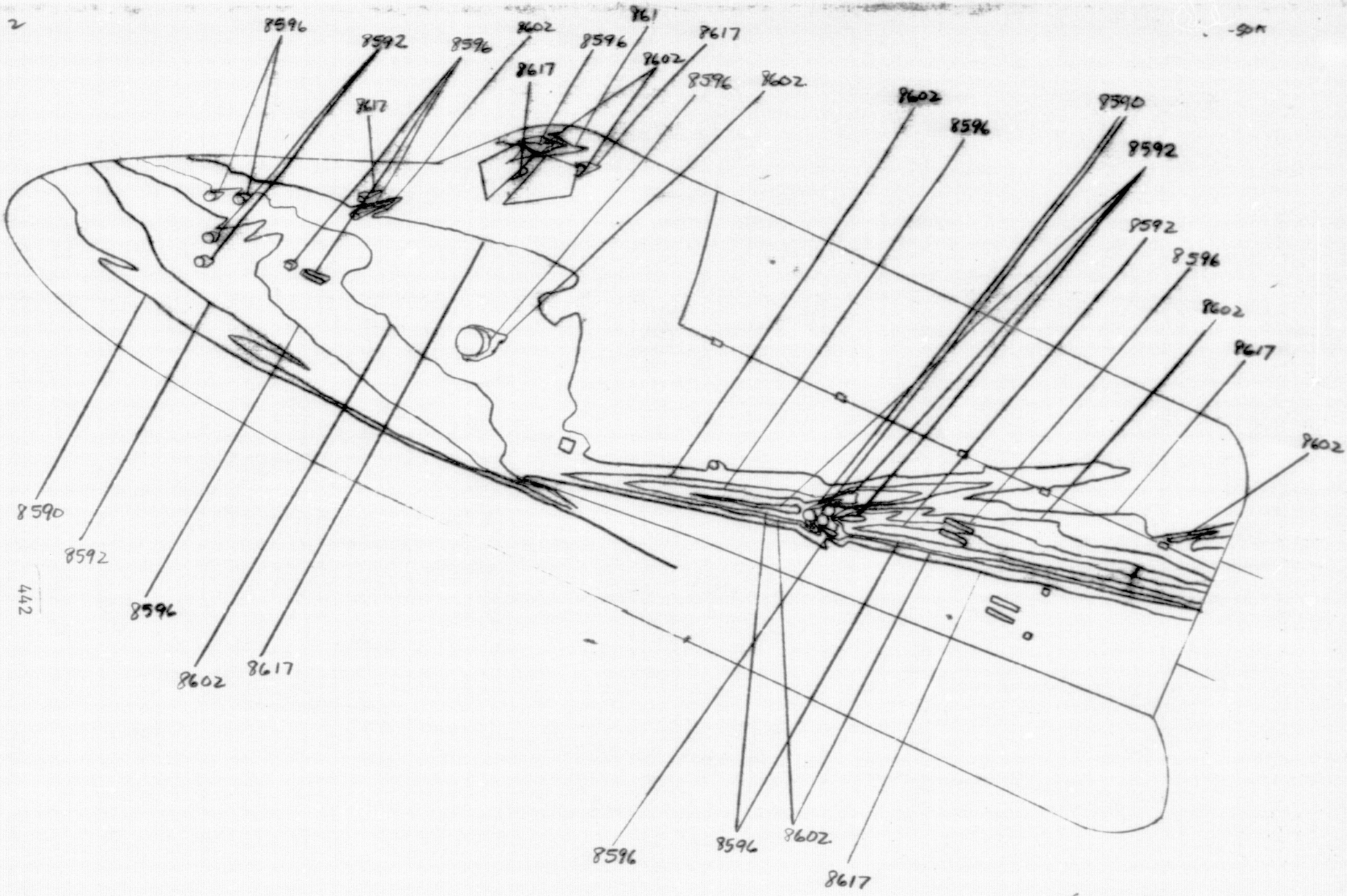
GROUP 3C
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GROUP 36
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GROUP 36
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4/10/74

NASA-RT OHEO — AEDC(AWO.INC.) ARNOLD AFS, TENNESSEE
VASPE — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
36	0	7.94	210.0	1269	25.00	4.98	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (R= .04 FT)	STREF (R= .04 FT)
93.2	.023	.447	3757	2.133E-05	7.507E-08	1.017E 06	1.615E-02	2.668E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TRAN(TO)	BETA(TO)
NOP SIDE(NOS)	7623	113	81	.0486	0	0
OP SIDE(OS)	7687	113	81	.0486	0	0
BOTTOM(BOT)	8058	113	81	.0486	0	0
TOP(TOP)	8039	175	81	.0518	0	0

PIC NO	TIME DELTIME		H(TO)	H(TO)/RREF	H(.9TO)	H(.9TO)/RREF	H(.902TO)	H(.902TO)/RREF	ST(TO)
HO 4088(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 7015(175)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 2015(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 8588(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 2016(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 4089(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 8589(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
TO 7016(175)	1.13		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.75								
TOP 7017(175)	2.18	1.19	6.148E-03	.3742	7.513E-03	.4568	8.546E-03	.5267	9.864E-03
OS 2017(113)	2.18	1.19	1.796E-03	.1111	2.190E-03	.1355	2.462E-03	.1523	2.938E-03
BOT 4090(113)	2.18	1.19	1.796E-03	.1111	2.190E-03	.1355	2.462E-03	.1523	2.938E-03
NOS 8590(113)	2.18	1.19	1.796E-03	.1111	2.190E-03	.1355	2.462E-03	.1523	2.938E-03
TOP 7018(175)	3.25	2.27	4.282E-03	.2715	5.446E-03	.3372	6.198E-03	.3836	7.160E-03
OS 2018(113)	3.25	2.27	1.402E-03	.0806	1.588E-03	.0983	1.786E-03	.1105	2.133E-03
BOT 4091(113)	3.25	2.27	1.402E-03	.0806	1.588E-03	.0983	1.786E-03	.1105	2.133E-03
NOS 8591(113)	3.25	2.27	1.402E-03	.0806	1.588E-03	.0983	1.786E-03	.1105	2.133E-03
OS 2019(113)	4.33	3.35	1.272E-03	.0664	1.308E-03	.0810	1.471E-03	.0910	1.757E-03
TOP 7019(175)	4.36	3.37	3.599E-03	.2228	4.471E-03	.2767	5.046E-03	.3148	5.875E-03
BOT 4092(113)	4.36	3.37	1.269E-03	.0661	1.303E-03	.0807	1.465E-03	.0907	1.750E-03
NOS 8592(113)	4.36	3.37	1.269E-03	.0661	1.303E-03	.0807	1.465E-03	.0907	1.750E-03
BOT 4093(113)	5.01	4.02	9.723E-04	.0505	1.193E-03	.0738	1.342E-03	.0829	1.599E-03
TOP 7020(175)	5.03	4.05	3.655E-03	.2031	4.085E-03	.2523	4.642E-03	.2871	5.352E-03
OS 2020(113)	5.03	4.05	9.752E-04	.0603	1.189E-03	.0736	1.337E-03	.0827	1.594E-03
NOS 8593(113)	5.03	4.05	9.752E-04	.0603	1.189E-03	.0736	1.337E-03	.0827	1.594E-03
TOP 7021(175)	6.11	5.12	3.419E-03	.1806	3.827E-03	.2243	4.126E-03	.2552	4.759E-03
OS 2021(113)	6.11	5.12	8.668E-04	.0536	1.057E-03	.0654	1.189E-03	.0735	1.418E-03
BOT 4094(113)	6.11	5.12	8.668E-04	.0536	1.057E-03	.0654	1.189E-03	.0735	1.418E-03
NOS 8594(113)	6.11	5.12	8.668E-04	.0536	1.057E-03	.0654	1.189E-03	.0735	1.418E-03

REPRODUCED AT GOVERNMENT EXPENSE

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4/10/74

NASA-RI OHED — AEDC(APO,IAC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
36	0	7.94	210.4	1269	25.00	4.98	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	.549	3757	2.736E-05	7.504E-08	1.019E 06	1.617E-02	2.665E-02

CAMERA	ROLL PO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCXR)	THAR(TO)	BETA(TO)
WOF SIDE(NOS)	7623	113	81	.0486	4.396E-02	4.0369E-02
OP SIDE(OS)	7687	113	81	.0486	4.396E-02	4.0369E-02
BOTTOM(BOT)	8058	113	81	.0486	4.396E-02	4.0369E-02
TOP(TOP)	8673	175	81	.0518	1.291E-01	1.2757E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 7022(175)	7.18	6.20	2.654E-03	.1641	3.297E-03	.2039	3.750E-03	.2319	4.324E-03
OS 2022(113)	7.18	6.20	7.880E-04	.0487	9.611E-04	.0594	1.081E-03	.0668	1.288E-03
BOT 4095(113)	7.18	6.20	7.880E-04	.0487	9.611E-04	.0594	1.081E-03	.0668	1.288E-03
NOS 8595(113)	7.18	6.20	7.880E-04	.0487	9.611E-04	.0594	1.081E-03	.0668	1.288E-03
TOP 7023(175)	8.28	7.30	2.446E-03	.1512	3.036E-03	.1879	3.456E-03	.2137	3.985E-03
OS 2023(113)	8.28	7.30	7.261E-04	.0449	8.856E-04	.0548	9.957E-04	.0616	1.187E-03
BOT 4096(113)	8.28	7.30	7.261E-04	.0449	8.856E-04	.0548	9.957E-04	.0616	1.187E-03
NOS 8596(113)	8.28	7.30	7.261E-04	.0449	8.856E-04	.0548	9.957E-04	.0616	1.187E-03
TOP 7024(175)	9.36	8.38	2.283E-03	.1412	2.836E-03	.1753	3.226E-03	.1995	3.718E-03
OS 2024(113)	9.36	8.38	6.779E-04	.0419	8.268E-04	.0511	9.296E-04	.0575	1.108E-03
BOT 4097(113)	9.36	8.38	6.779E-04	.0419	8.268E-04	.0511	9.296E-04	.0575	1.108E-03
NOS 8597(113)	9.36	8.38	6.779E-04	.0419	8.268E-04	.0511	9.296E-04	.0575	1.108E-03
BOT 4098(113)	10.44	9.45	6.381E-04	.0394	7.783E-04	.0481	8.751E-04	.0541	1.042E-03
TOP 7025(175)	10.46	9.48	2.146E-03	.1327	2.666E-03	.1648	3.033E-03	.1875	3.496E-03
OS 2025(113)	10.46	9.48	6.373E-04	.0394	7.773E-04	.0481	8.739E-04	.0540	1.041E-03
NOS 8598(113)	10.46	9.48	6.373E-04	.0394	7.773E-04	.0481	8.739E-04	.0540	1.041E-03
TOP 7026(175)	11.54	10.55	2.034E-03	.1257	2.527E-03	.1562	2.874E-03	.1777	3.311E-03
OS 2026(112)	11.54	10.55	6.033E-04	.0373	7.366E-04	.0455	8.282E-04	.0512	9.864E-04
BOT 4099(113)	11.54	10.55	6.033E-04	.0373	7.366E-04	.0455	8.282E-04	.0512	9.864E-04
NOS 8599(112)	11.54	10.55	6.033E-04	.0373	7.366E-04	.0455	8.282E-04	.0512	9.864E-04
TOP 7027(175)	12.61	11.63	1.919E-03	.1188	2.407E-03	.1488	2.738E-03	.1692	3.154E-03
OS 2027(113)	12.61	11.63	5.753E-04	.0356	7.017E-04	.0434	7.889E-04	.0488	9.396E-04
BOT 4100(113)	12.61	11.63	5.753E-04	.0356	7.017E-04	.0434	7.889E-04	.0488	9.396E-04
NOS 8600(113)	12.61	11.63	5.753E-04	.0356	7.017E-04	.0434	7.889E-04	.0488	9.396E-04
TOP 7028(175)	13.72	12.73	1.852E-03	.1144	2.301E-03	.1422	2.617E-03	.1617	3.013E-03
OS 2028(113)	13.72	12.73	5.549E-04	.0343	6.706E-04	.0414	7.540E-04	.0466	8.976E-04
BOT 4101(113)	13.72	12.73	5.549E-04	.0343	6.706E-04	.0414	7.540E-04	.0466	8.976E-04
NOS 8601(113)	13.72	12.73	5.549E-04	.0343	6.706E-04	.0414	7.540E-04	.0466	8.976E-04

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4/10/74

NASA-RI OH60 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTCH	ALPHA-PREBEND	ROLL-MODEL	YAW
36	0	7.94	210.8	1269	25.00	4.98	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	ML-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.2	.023	1.091	3757	2.640E-05	7.500E-08	1.021E 06	1.619E-02	2.663E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7623	113	81	.0486	4.396E-02	4.0369E-02
UP SIDE(OS)	7687	113	81	.0486	4.396E-02	4.0369E-02
HOTTOM(BOT)	8058	113	81	.0486	4.396E-02	4.0369E-02
TOP(TOP)	8039	175	81	.0518	1.291E-01	1.2757E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	SI(TO)
TOP 7029(175)	14.79	13.81	1.779E-03	.1099	2.209E-03	.1365	2.513E-03	.1553	2.894E-03
OS 2029(113)	14.79	13.81	5.288E-04	.0326	6.440E-04	.0398	7.240E-04	.0447	8.620E-04
HOT 4102(113)	14.79	13.81	5.288E-04	.0326	6.440E-04	.0398	7.240E-04	.0447	8.620E-04
NOS 8602(113)	14.79	13.81	5.288E-04	.0326	6.440E-04	.0398	7.240E-04	.0447	8.620E-04
TOP 7030(175)	15.89	14.91	1.711E-03	.1057	2.120E-03	.1313	2.418E-03	.1494	2.783E-03
OS 2030(113)	15.89	14.91	5.081E-04	.0314	6.197E-04	.0383	6.968E-04	.0430	8.291E-04
HOT 4103(113)	15.89	14.91	5.081E-04	.0314	6.197E-04	.0383	6.968E-04	.0430	8.291E-04
NOS 8603(113)	15.89	14.91	5.081E-04	.0314	6.197E-04	.0383	6.968E-04	.0430	8.291E-04
TOP 7031(175)	16.97	15.99	1.653E-03	.1021	2.053E-03	.1268	2.336E-03	.1443	2.687E-03
OS 2031(113)	16.97	15.99	4.907E-04	.0303	5.985E-04	.0370	6.729E-04	.0416	8.003E-04
HOT 4104(113)	16.97	15.99	4.907E-04	.0303	5.985E-04	.0370	6.729E-04	.0416	8.003E-04
NOS 8604(113)	16.97	15.99	4.907E-04	.0303	5.985E-04	.0370	6.729E-04	.0416	8.003E-04
HOT 4105(113)	18.05	17.06	4.756E-04	.0293	5.793E-04	.0358	6.514E-04	.0402	7.750E-04
TOP 7032(175)	18.07	17.09	1.555E-03	.0987	1.936E-03	.1226	2.259E-03	.1395	2.597E-03
OS 2032(113)	18.07	17.09	4.746E-04	.0293	5.789E-04	.0357	6.509E-04	.0402	7.737E-04
NOS 8605(113)	18.07	17.09	4.746E-04	.0293	5.789E-04	.0357	6.509E-04	.0402	7.737E-04
TOP 7033(175)	19.15	18.16	1.551E-03	.0958	1.920E-03	.1190	2.191E-03	.1354	2.523E-03
OS 2033(113)	19.15	18.16	4.603E-04	.0284	5.615E-04	.0347	6.313E-04	.0390	7.515E-04
HOT 4106(113)	19.15	18.16	4.603E-04	.0284	5.615E-04	.0347	6.313E-04	.0390	7.515E-04
NOS 8606(113)	19.15	18.16	4.603E-04	.0284	5.615E-04	.0347	6.313E-04	.0390	7.515E-04
TOP 7034(175)	20.22	19.24	1.507E-03	.0931	1.871E-03	.1156	2.129E-03	.1315	2.449E-03
OS 2034(113)	20.22	19.24	4.473E-04	.0276	5.456E-04	.0337	6.134E-04	.0379	7.295E-04
HOT 4107(113)	20.22	19.24	4.473E-04	.0276	5.456E-04	.0337	6.134E-04	.0379	7.295E-04
NOS 8607(113)	20.25	19.25	4.473E-04	.0276	5.456E-04	.0337	6.133E-04	.0379	7.290E-04
TOP 7035(175)	21.32	20.34	1.466E-03	.0905	1.820E-03	.1124	2.070E-03	.1279	2.381E-03
OS 2035(113)	21.32	20.34	4.286E-04	.0265	5.306E-04	.0328	5.966E-04	.0368	7.091E-04
HOT 4108(113)	21.32	20.34	4.286E-04	.0265	5.306E-04	.0328	5.966E-04	.0368	7.091E-04
NOS 8608(113)	21.32	20.34	4.286E-04	.0265	5.306E-04	.0328	5.966E-04	.0368	7.091E-04

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NASA-RI OH59

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
36	0	7.96	211.1	1269	25.00	4.98	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.2	.023	1.002	3757	2.43E-05	7.507E-09	1.023E 06	1.619E-02	2.661E-02

CAREEA	ROLL NO	PRINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACXR)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7623	113	81	.0486	4.396E-02	4.0369E-02
UP SIDE(US)	7687	113	81	.0486	4.396E-02	4.0369E-02
BOTTOM(BOT)	8058	113	81	.0486	4.396E-02	4.0369E-02
TOP(TOP)	8039	175	81	.0518	1.291E-01	1.2757E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
US 2036(113)	22.40	21.42	4.239E-04	.0262	5.171E-04	.0319	5.814E-04	.0359	6.911E-04
HOT 4109(113)	22.40	21.42	4.239E-04	.0262	5.171E-04	.0319	5.814E-04	.0359	6.911E-04
NOS 8609(113)	22.40	21.42	4.239E-04	.0262	5.171E-04	.0319	5.814E-04	.0359	6.911E-04
TOP 7036(175)	22.43	21.44	1.427E-03	.0881	1.773E-03	.1095	2.017E-03	.1245	2.319E-03
TOP 7037(175)	23.48	22.49	1.393E-03	.0861	1.731E-03	.1069	1.969E-03	.1215	2.265E-03
US 2037(113)	23.48	22.49	4.137E-04	.0256	5.046E-04	.0312	5.673E-04	.0350	6.747E-04
HOT 4110(113)	23.50	22.52	4.134E-04	.0255	5.043E-04	.0311	5.670E-04	.0350	6.740E-04
NOS 8610(113)	23.50	22.52	4.134E-04	.0255	5.043E-04	.0311	5.670E-04	.0350	6.740E-04
TOP 7038(175)	24.58	23.59	1.365E-03	.0840	1.690E-03	.1044	1.922E-03	.1187	2.210E-03
US 2038(113)	24.58	23.59	4.038E-04	.0249	4.926E-04	.0304	5.539E-04	.0342	6.584E-04
HOT 4111(113)	24.58	23.59	4.038E-04	.0249	4.926E-04	.0304	5.539E-04	.0342	6.584E-04
NOS 8611(113)	24.58	23.59	4.038E-04	.0249	4.926E-04	.0304	5.539E-04	.0342	6.584E-04
HOT 4112(113)	25.65	24.67	3.958E-04	.0244	4.818E-04	.0297	5.417E-04	.0334	6.436E-04
TOP 7039(175)	25.68	24.70	1.332E-03	.0821	1.652E-03	.1020	1.879E-03	.1160	2.160E-03
US 2039(113)	25.68	24.70	3.948E-04	.0244	4.815E-04	.0297	5.414E-04	.0334	6.436E-04
NOS 8612(113)	25.68	24.70	3.948E-04	.0244	4.815E-04	.0297	5.414E-04	.0334	6.436E-04
TOP 7040(175)	26.76	25.77	1.402E-03	.0803	1.617E-03	.0998	1.839E-03	.1135	2.113E-03
US 2040(113)	26.76	25.77	3.855E-04	.0239	4.714E-04	.0291	5.300E-04	.0327	6.294E-04
HOT 4113(113)	26.76	25.77	3.855E-04	.0239	4.714E-04	.0291	5.300E-04	.0327	6.294E-04
NOS 8613(113)	26.76	25.77	3.855E-04	.0239	4.714E-04	.0291	5.300E-04	.0327	6.294E-04
TOP 7041(175)	27.83	26.85	1.275E-03	.0788	1.584E-03	.0978	1.802E-03	.1113	2.072E-03
US 2041(113)	27.83	26.85	3.748E-04	.0234	4.618E-04	.0285	5.193E-04	.0321	6.173E-04
HOT 4114(113)	27.83	26.85	3.748E-04	.0234	4.618E-04	.0285	5.193E-04	.0321	6.173E-04
NOS 8614(113)	27.83	26.85	3.748E-04	.0234	4.618E-04	.0285	5.193E-04	.0321	6.173E-04
TOP 7042(175)	28.93	27.95	1.252E-03	.0772	1.553E-03	.0958	1.766E-03	.1090	2.029E-03
US 2042(113)	28.93	27.95	3.711E-04	.0229	4.526E-04	.0279	5.049E-04	.0314	6.044E-04
HOT 4115(113)	28.93	27.95	3.711E-04	.0229	4.526E-04	.0279	5.049E-04	.0314	6.044E-04
NOS 8615(113)	28.93	27.95	3.711E-04	.0229	4.526E-04	.0279	5.049E-04	.0314	6.044E-04

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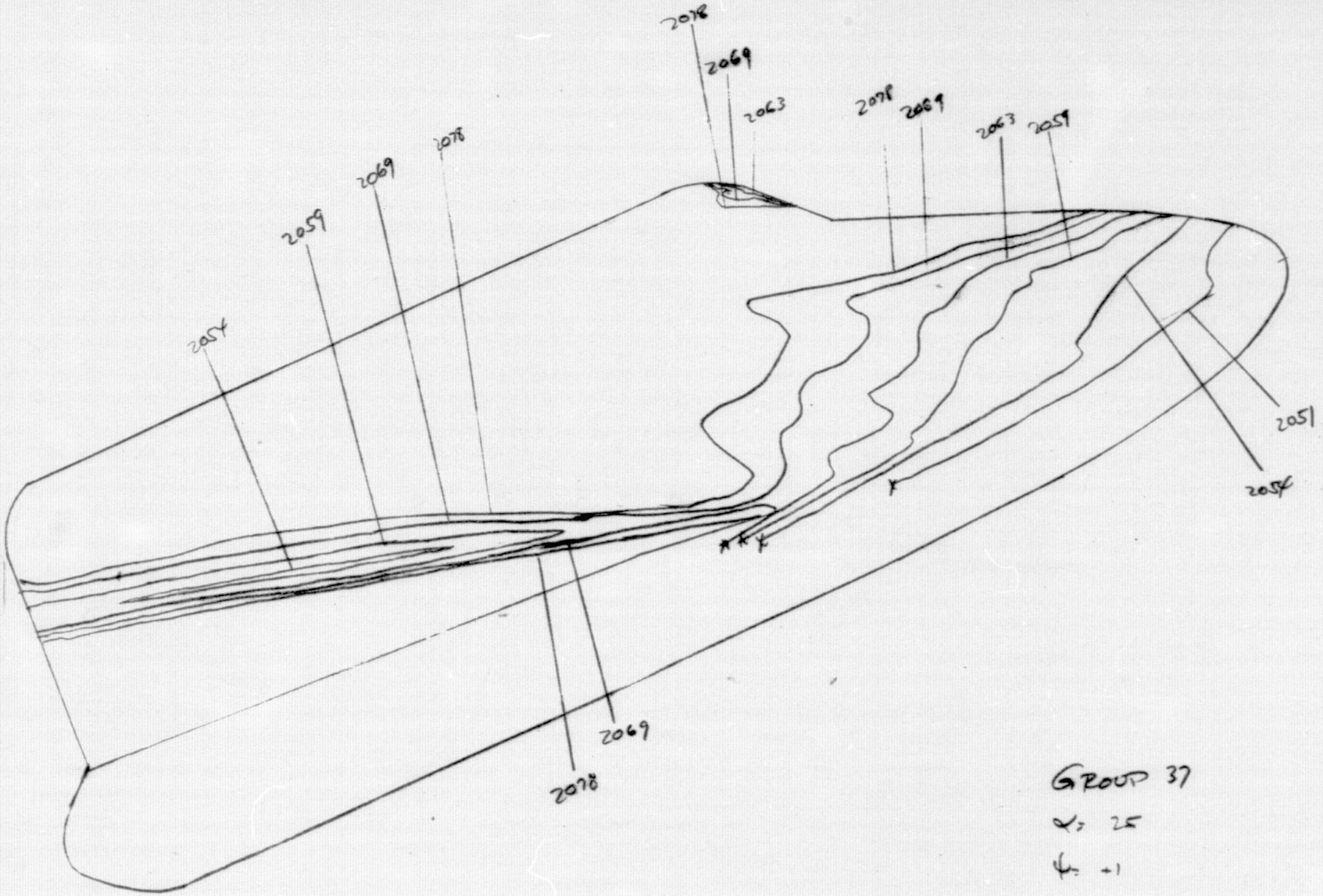
NASA-RI OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA52E 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
36	0	7.94	211.3	1269	25.00	4.98	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSI)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.2	.023	1.013	3757	2.145E-05	7.500E-08	1.023E 06	1.529E-02	2.66nF-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7623	113	81	.0486	4.396E-02	4.0369E-02
OP SIDE(OS)	7687	113	81	.0486	4.396E-02	4.0369E-02
HOT(CM(HOT)	8058	113	81	.0486	4.396E-02	4.0369E-02
TOP(TOP)	8039	175	81	.0518	1.291E-01	1.2757E-01

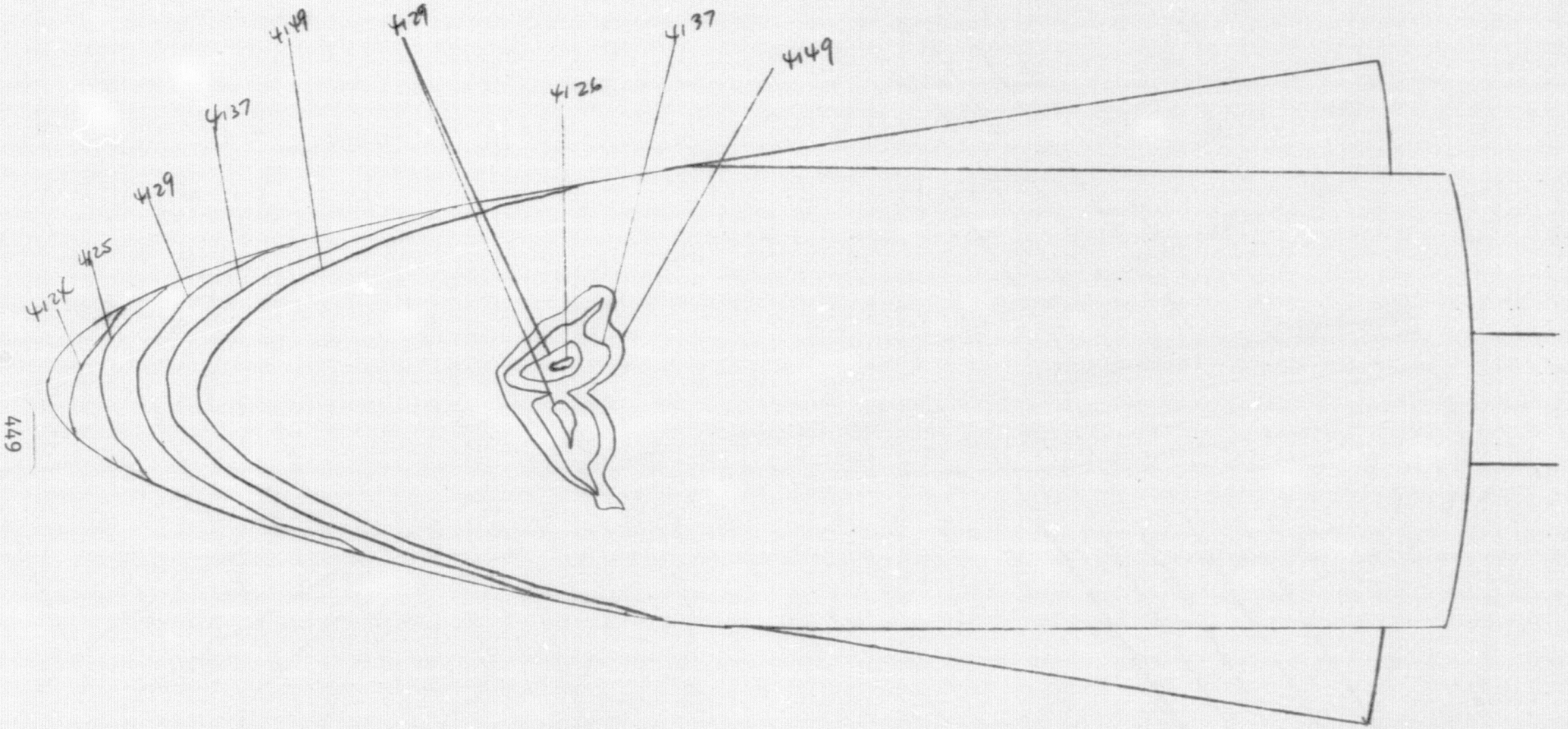
PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 7043(175)	30.01	29.03	1.227E-03	.0758	1.529E-03	.0942	1.733E-03	.1071	1.989E-03
OS 2043(113)	30.01	29.03	3.642E-04	.0225	4.442E-04	.0275	4.994E-04	.0309	5.926E-04
HOT 4116(113)	30.01	29.03	3.642E-04	.0225	4.442E-04	.0275	4.994E-04	.0309	5.926E-04
NOS 8616(113)	30.01	29.03	3.642E-04	.0225	4.442E-04	.0275	4.994E-04	.0309	5.926E-04
TOP 7044(175)	31.11	30.13	1.204E-03	.0743	1.496E-03	.0923	1.701E-03	.1050	1.955E-03
OS 2044(113)	31.11	30.13	3.574E-04	.0221	4.360E-04	.0269	4.902E-04	.0303	5.824E-04
HOT 4117(113)	31.11	30.13	3.574E-04	.0221	4.360E-04	.0269	4.902E-04	.0303	5.824E-04
NOS 8617(113)	31.11	30.13	3.574E-04	.0221	4.360E-04	.0269	4.902E-04	.0303	5.824E-04
	31.96		MODEL HAS LEFT CENTERLINE						
TOP 7045(175)	32.19	31.20	1.183E-03	.0730	1.470E-03	.0907	1.672E-03	.1032	1.920E-03
OS 2045(113)	32.19	31.20	3.512E-04	.0217	4.284E-04	.0264	4.817E-04	.0297	5.721E-04
HOT 4118(113)	32.19	31.20	3.512E-04	.0217	4.284E-04	.0264	4.817E-04	.0297	5.721E-04
NOS 8618(113)	32.19	31.20	3.512E-04	.0217	4.284E-04	.0264	4.817E-04	.0297	5.721E-04
HOT 4119(113)	33.26	32.28	3.453E-04	.0213	4.212E-04	.0260	4.736E-04	.0292	5.624E-04
TOP 7046(175)	33.29	32.30	1.169E-03	.0717	1.444E-03	.0891	1.643E-03	.1014	1.886E-03
OS 2046(113)	33.29	32.30	3.452E-04	.0213	4.210E-04	.0260	4.734E-04	.0292	5.620E-04
NOS 8619(113)	33.29	32.30	3.452E-04	.0213	4.210E-04	.0260	4.734E-04	.0292	5.620E-04
TOP 7047(175)	34.36	33.38	1.144E-03	.0706	1.421E-03	.0877	1.616E-03	.0998	1.857E-03
OS 2047(113)	34.36	33.38	3.396E-04	.0210	4.142E-04	.0256	4.657E-04	.0287	5.533E-04
HOT 4120(113)	34.36	33.38	3.396E-04	.0210	4.142E-04	.0256	4.657E-04	.0287	5.533E-04
NOS 8620(113)	34.36	33.38	3.396E-04	.0210	4.142E-04	.0256	4.657E-04	.0287	5.533E-04



GROUP 37

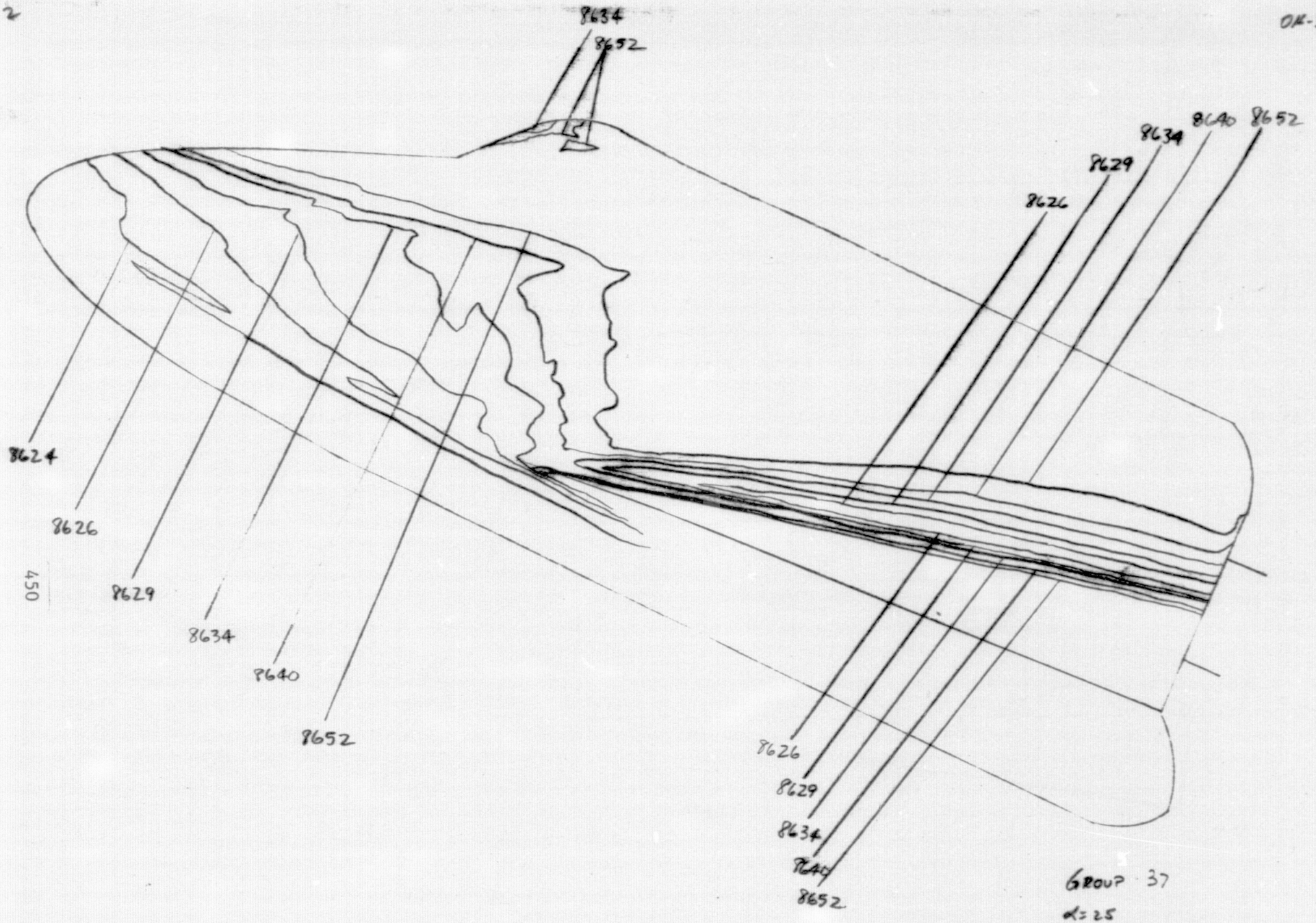
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ϕ: +1



GROUP 37
$\alpha = 25$
$\psi = +1$

OK-50A



GROUP 37
$\alpha = 25$
$\psi = 11$

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NASA-RI OHIO — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
37	0	7.94	211.9	1270	24.99	4.99	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SIREF (R= .04 FT)
93.3	.023	1.026	3754	2.450E-05	7.513E-08	1.025E 06	1.423E-02	2.657E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACXK)	TEAR(TO)	BETA(TO)
NOF SIDE(NOS)	7623	113	82	.0486	0	0
UP SIDE(US)	7687	113	82	.0486	0	0
HOTTOM(HOT)	8058	113	82	.0486	0	0
TOP(TOP)	8039	113	82	.0486	0	0

PIC NO	TIME DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TO 7649(113)	.03	MODEL HAS NOT REACHED CENTERLINE						
US 2049(113)	.03	MODEL HAS NOT REACHED CENTERLINE						
HO 4122(113)	.03	MODEL HAS NOT REACHED CENTERLINE						
NO 8622(113)	.03	MODEL HAS NOT REACHED CENTERLINE						
HO 4123(113)	1.08	MODEL HAS NOT REACHED CENTERLINE						
TO 7650(113)	1.10	MODEL HAS NOT REACHED CENTERLINE						
US 2050(113)	1.10	MODEL HAS NOT REACHED CENTERLINE						
NO 8623(113)	1.10	MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.73							
HOT 4124(113)	2.15	1.18	1.745E-03	.1075	2.131E-03	.1313	2.394E-03	.1476	2.835E-03
TOP 7651(113)	2.18	1.21	1.727E-03	.1064	2.109E-03	.1299	2.370E-03	.1460	2.804E-03
US 2051(113)	2.18	1.21	1.727E-03	.1064	2.109E-03	.1299	2.370E-03	.1460	2.804E-03
NOS 8624(113)	2.18	1.21	1.727E-03	.1064	2.109E-03	.1299	2.370E-03	.1460	2.804E-03
TOP 7652(113)	3.25	2.28	1.256E-03	.0774	1.534E-03	.0945	1.723E-03	.1062	2.040E-03
US 2052(113)	3.25	2.28	1.256E-03	.0774	1.534E-03	.0945	1.723E-03	.1062	2.040E-03
HOT 4125(113)	3.25	2.28	1.256E-03	.0774	1.534E-03	.0945	1.723E-03	.1062	2.040E-03
NOS 8625(113)	3.25	2.28	1.256E-03	.0774	1.534E-03	.0945	1.723E-03	.1062	2.040E-03
TOP 7653(113)	4.33	3.36	1.038E-03	.0638	1.264E-03	.0779	1.421E-03	.0876	1.682E-03
US 2053(113)	4.33	3.36	1.038E-03	.0638	1.264E-03	.0779	1.421E-03	.0876	1.682E-03
HOT 4126(113)	4.33	3.36	1.038E-03	.0638	1.264E-03	.0779	1.421E-03	.0876	1.682E-03
NOS 8626(113)	4.33	3.36	1.038E-03	.0638	1.264E-03	.0779	1.421E-03	.0876	1.682E-03
TOP 7654(113)	5.43	4.46	9.685E-04	.0554	1.097E-03	.0676	1.233E-03	.0760	1.460E-03
US 2054(113)	5.43	4.46	9.685E-04	.0554	1.097E-03	.0676	1.233E-03	.0760	1.460E-03
HOT 4127(113)	5.43	4.46	9.685E-04	.0554	1.097E-03	.0676	1.233E-03	.0760	1.460E-03
NOS 8627(113)	5.43	4.46	9.685E-04	.0554	1.097E-03	.0676	1.233E-03	.0760	1.460E-03
TOP 7655(113)	6.51	5.54	8.865E-04	.0497	9.850E-04	.0607	1.107E-03	.0682	1.310E-03
US 2055(113)	6.51	5.54	8.865E-04	.0497	9.850E-04	.0607	1.107E-03	.0682	1.310E-03
HOT 4128(113)	6.51	5.54	8.865E-04	.0497	9.850E-04	.0607	1.107E-03	.0682	1.310E-03
NOS 8628(113)	6.51	5.54	8.865E-04	.0497	9.850E-04	.0607	1.107E-03	.0682	1.310E-03

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NASA-RT OH50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
37	F	7.94	211.9	1270	24.99	4.99	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	AREF (R= .04 FT)	SIREF (R= .04 FT)
93.3	.023	1.0?6	375?	2.?49E-05	7.513E-0?	1.025E 06	1.623E-02	2.657E-02

CAPERA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAN)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7E23	113	82	.0486	4.259E-02	3.9053E-02
OP SIDE(OS)	7E?7	113	82	.0486	4.259E-02	3.9053E-02
BOTTOM(BOT)	8C5?	113	82	.0486	4.259E-02	3.9053E-02
TOP(TOP)	8039	113	82	.0486	4.259E-02	3.9053E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 7056(113)	7.61	6.64	7.366E-04	.0454	8.996E-04	.0554	1.011E-03	.0623	1.197E-03
OS 2056(113)	7.61	6.64	7.366E-04	.0454	8.996E-04	.0554	1.011E-03	.0623	1.197E-03
HOT 4129(113)	7.61	6.64	7.366E-04	.0454	8.996E-04	.0554	1.011E-03	.0623	1.197E-03
NOS 8629(113)	7.61	6.64	7.366E-04	.0454	8.996E-04	.0554	1.011E-03	.0623	1.197E-03
TOP 7057(113)	8.68	7.72	6.833E-04	.0421	8.345E-04	.0515	9.376E-04	.0578	1.111E-03
OS 2057(113)	8.68	7.72	6.833E-04	.0421	8.345E-04	.0515	9.376E-04	.0578	1.111E-03
HOT 4130(113)	8.68	7.72	6.833E-04	.0421	8.345E-04	.0515	9.376E-04	.0578	1.111E-03
NOS 8630(113)	8.68	7.72	6.833E-04	.0421	8.345E-04	.0515	9.376E-04	.0578	1.111E-03
TOP 7058(113)	9.76	8.79	6.401E-04	.0395	7.817E-04	.0482	8.783E-04	.0542	1.041E-03
OS 2058(113)	9.76	8.79	6.401E-04	.0395	7.817E-04	.0482	8.783E-04	.0542	1.041E-03
HOT 4131(113)	9.76	8.79	6.401E-04	.0395	7.817E-04	.0482	8.783E-04	.0542	1.041E-03
NOS 8631(113)	9.76	8.79	6.401E-04	.0395	7.817E-04	.0482	8.783E-04	.0542	1.041E-03
TOP 7059(113)	10.86	9.89	6.034E-04	.0372	7.369E-04	.0454	8.280E-04	.0510	9.808E-04
OS 2059(113)	10.86	9.89	6.034E-04	.0372	7.369E-04	.0454	8.280E-04	.0510	9.808E-04
HOT 4132(113)	10.86	9.89	6.034E-04	.0372	7.369E-04	.0454	8.280E-04	.0510	9.808E-04
NOS 8632(113)	10.80	9.89	6.034E-04	.0372	7.369E-04	.0454	8.280E-04	.0510	9.808E-04
TOP 7060(113)	11.94	10.97	5.731E-04	.0353	6.999E-04	.0431	7.863E-04	.0485	9.310E-04
OS 2060(113)	11.94	10.97	5.731E-04	.0353	6.999E-04	.0431	7.863E-04	.0485	9.310E-04
HOT 4133(113)	11.94	10.97	5.731E-04	.0353	6.999E-04	.0431	7.863E-04	.0485	9.310E-04
NOS 8633(113)	11.94	10.97	5.731E-04	.0353	6.999E-04	.0431	7.863E-04	.0485	9.310E-04
TOP 7061(113)	13.04	12.07	5.463E-04	.0337	6.672E-04	.0411	7.496E-04	.0462	8.879E-04
OS 2061(113)	13.04	12.07	5.463E-04	.0337	6.672E-04	.0411	7.496E-04	.0462	8.879E-04
HOT 4134(113)	13.04	12.07	5.463E-04	.0337	6.672E-04	.0411	7.496E-04	.0462	8.879E-04
NOS 8634(113)	13.04	12.07	5.463E-04	.0337	6.672E-04	.0411	7.496E-04	.0462	8.879E-04
TOP 7062(113)	14.12	13.15	5.235E-04	.0323	6.393E-04	.0394	7.183E-04	.0443	8.516E-04
OS 2062(113)	14.12	13.15	5.235E-04	.0323	6.393E-04	.0394	7.183E-04	.0443	8.516E-04
HOT 4135(113)	14.12	13.15	5.235E-04	.0323	6.393E-04	.0394	7.183E-04	.0443	8.516E-04
NOS 8635(113)	14.12	13.15	5.235E-04	.0323	6.393E-04	.0394	7.183E-04	.0443	8.516E-04

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE

VASP6 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREHEND	ROLL-MODEL	YAW
37	0	7.94	211.6	1270	24.99	4.99	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (R= .04 FT)	SIREF (R= .04 FT)
93.3	.022	1.05	3754	2.047E-05	7.513E-08	1.024E 06	1.621E-02	2.659E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACXR)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7623	113	82	.0486	4.259E-02	3.9053E-02
UP SIDE(US)	7687	113	82	.0486	4.259E-02	3.9053E-02
HOTTOM(BOT)	8658	113	82	.0486	4.259E-02	3.9053E-02
TOP(TOP)	8039	113	82	.0486	4.259E-02	3.9053E-02

PTC NO	TIME	RELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
HOT 4136(113)	15.19	14.22	5.[illegible]E-04	.0310	6.146E-04	.0379	6.906E-04	.0426	8.188E-04
TOP 7063(113)	15.22	14.25	5.[illegible]E-04	.0310	6.141E-04	.0379	6.900E-04	.0426	8.184E-04
US 7063(113)	15.22	14.25	5.[illegible]E-04	.0310	6.141E-04	.0379	6.900E-04	.0426	8.184E-04
NOS 8636(113)	15.22	14.25	5.[illegible]E-04	.0310	6.141E-04	.0379	6.900E-04	.0426	8.184E-04
TOP 7064(113)	16.24	15.32	4.[illegible]E-04	.0299	5.921E-04	.0365	6.653E-04	.0410	7.881E-04
US 7064(113)	16.24	15.32	4.[illegible]E-04	.0299	5.921E-04	.0365	6.653E-04	.0410	7.881E-04
HOT 4137(113)	16.24	15.32	4.[illegible]E-04	.0299	5.921E-04	.0365	6.653E-04	.0410	7.881E-04
NOS 8637(113)	16.24	15.32	4.[illegible]E-04	.0299	5.921E-04	.0365	6.653E-04	.0410	7.881E-04
TOP 7065(113)	17.37	16.40	4.[illegible]E-04	.0289	5.724E-04	.0353	6.431E-04	.0397	7.624E-04
US 7065(113)	17.37	16.40	4.[illegible]E-04	.0289	5.724E-04	.0353	6.431E-04	.0397	7.624E-04
HOT 4138(113)	17.37	16.40	4.[illegible]E-04	.0289	5.724E-04	.0353	6.431E-04	.0397	7.624E-04
NOS 8638(113)	17.37	16.40	4.[illegible]E-04	.0289	5.724E-04	.0353	6.431E-04	.0397	7.624E-04
TOP 7066(113)	18.47	17.50	4.[illegible]E-04	.0280	5.541E-04	.0342	6.225E-04	.0384	7.377E-04
US 7066(113)	18.47	17.50	4.[illegible]E-04	.0280	5.541E-04	.0342	6.225E-04	.0384	7.377E-04
HOT 4139(113)	18.47	17.50	4.[illegible]E-04	.0280	5.541E-04	.0342	6.225E-04	.0384	7.377E-04
NOS 8639(113)	18.47	17.50	4.[illegible]E-04	.0280	5.541E-04	.0342	6.225E-04	.0384	7.377E-04
TOP 7067(113)	19.55	18.58	4.[illegible]E-04	.0272	5.378E-04	.0332	6.042E-04	.0373	7.164E-04
US 7067(113)	19.55	18.58	4.[illegible]E-04	.0272	5.378E-04	.0332	6.042E-04	.0373	7.164E-04
HOT 4140(113)	19.55	18.58	4.[illegible]E-04	.0272	5.378E-04	.0332	6.042E-04	.0373	7.164E-04
NOS 8640(113)	19.55	18.58	4.[illegible]E-04	.0272	5.378E-04	.0332	6.042E-04	.0373	7.164E-04
TOP 7068(113)	20.65	19.68	4.[illegible]E-04	.0264	5.225E-04	.0322	5.871E-04	.0362	6.964E-04
US 7068(113)	20.65	19.68	4.[illegible]E-04	.0264	5.225E-04	.0322	5.871E-04	.0362	6.964E-04
HOT 4141(113)	20.65	19.68	4.[illegible]E-04	.0264	5.225E-04	.0322	5.871E-04	.0362	6.964E-04
NOS 8641(113)	20.65	19.68	4.[illegible]E-04	.0264	5.225E-04	.0322	5.871E-04	.0362	6.964E-04
TOP 7069(113)	21.72	20.76	4.166E-04	.0257	5.088E-04	.0314	5.716E-04	.0352	6.775E-04
US 7069(113)	21.72	20.76	4.166E-04	.0257	5.088E-04	.0314	5.716E-04	.0352	6.775E-04
HOT 4142(113)	21.72	20.76	4.166E-04	.0257	5.088E-04	.0314	5.716E-04	.0352	6.775E-04
NOS 8642(113)	21.72	20.76	4.166E-04	.0257	5.088E-04	.0314	5.716E-04	.0352	6.775E-04

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NASA-RI OH50 — AEDC(AHO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VASPA — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
37	0	7.94	211.7	1270	24.99	4.99	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	1.035	3758	2.348E-05	7.513E-08	1.024E 06	1.622E-02	2.065E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCKXK)	TRAN(TO)	BETA(TO)
NOF SIDE(NOS)	7E23	113	82	.0486	4.259E-02	3.9053E-02
UP SIDE(US)	7E87	113	82	.0486	4.259E-02	3.9053E-02
BOTTOM(BOT)	8C58	113	82	.0486	4.259E-02	3.9053E-02
TOP(TOP)	8C39	113	82	.0486	4.259E-02	3.9053E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
HOT 4143(113)	22.90	21.83	4.052E-04	.0251	4.961E-04	.0306	5.574E-04	.0344	6.611E-04
TOP 7070(113)	22.83	21.86	4.058E-04	.0250	4.958E-04	.0306	5.571E-04	.0344	6.607E-04
US 2070(113)	22.83	21.86	4.058E-04	.0250	4.958E-04	.0306	5.571E-04	.0344	6.607E-04
NOS 8643(113)	22.83	21.86	4.058E-04	.0250	4.958E-04	.0306	5.571E-04	.0344	6.607E-04
TOP 7071(113)	23.03	22.03	3.668E-04	.0244	4.840E-04	.0299	5.438E-04	.0335	6.451E-04
US 2071(113)	23.03	22.03	3.668E-04	.0244	4.840E-04	.0299	5.438E-04	.0335	6.451E-04
HOT 4144(113)	23.03	22.03	3.668E-04	.0244	4.840E-04	.0299	5.438E-04	.0335	6.451E-04
NOS 8644(113)	23.03	22.03	3.668E-04	.0244	4.840E-04	.0299	5.438E-04	.0335	6.451E-04
US 2072(113)	24.08	24.01	3.573E-04	.0239	4.730E-04	.0292	5.315E-04	.0328	6.302E-04
HOT 4145(113)	24.08	24.01	3.573E-04	.0239	4.730E-04	.0292	5.315E-04	.0328	6.302E-04
TOP 7072(113)	25.00	24.03	3.571E-04	.0239	4.728E-04	.0292	5.312E-04	.0328	6.298E-04
NOS 8645(113)	25.00	24.03	3.571E-04	.0239	4.728E-04	.0292	5.312E-04	.0328	6.298E-04
TOP 7073(113)	26.08	25.11	3.528E-04	.0234	4.626E-04	.0285	5.197E-04	.0321	6.165E-04
US 2073(113)	26.08	25.11	3.528E-04	.0234	4.626E-04	.0285	5.197E-04	.0321	6.165E-04
HOT 4146(113)	26.08	25.11	3.528E-04	.0234	4.626E-04	.0285	5.197E-04	.0321	6.165E-04
NOS 8646(113)	26.08	25.11	3.528E-04	.0234	4.626E-04	.0285	5.197E-04	.0321	6.165E-04
TOP 7074(113)	27.16	26.19	3.409E-04	.0229	4.530E-04	.0279	5.089E-04	.0314	6.034E-04
US 2074(113)	27.16	26.19	3.409E-04	.0229	4.530E-04	.0279	5.089E-04	.0314	6.034E-04
HOT 4147(113)	27.16	26.19	3.409E-04	.0229	4.530E-04	.0279	5.089E-04	.0314	6.034E-04
NOS 8647(113)	27.15	26.19	3.409E-04	.0229	4.530E-04	.0279	5.089E-04	.0314	6.034E-04
TOP 7075(113)	28.26	27.29	3.333E-04	.0224	4.437E-04	.0274	4.986E-04	.0307	5.911E-04
US 2075(113)	28.26	27.29	3.333E-04	.0224	4.437E-04	.0274	4.986E-04	.0307	5.911E-04
HOT 4148(113)	28.26	27.29	3.333E-04	.0224	4.437E-04	.0274	4.986E-04	.0307	5.911E-04
NOS 8648(113)	28.26	27.29	3.333E-04	.0224	4.437E-04	.0274	4.986E-04	.0307	5.911E-04
TOP 7076(113)	29.33	28.36	3.264E-04	.0220	4.352E-04	.0269	4.890E-04	.0302	5.803E-04
US 2076(113)	29.33	28.36	3.264E-04	.0220	4.352E-04	.0269	4.890E-04	.0302	5.803E-04
HOT 4149(113)	29.33	28.36	3.264E-04	.0220	4.352E-04	.0269	4.890E-04	.0302	5.803E-04
NOS 8649(113)	29.33	28.36	3.264E-04	.0220	4.352E-04	.0269	4.890E-04	.0302	5.803E-04

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NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
37	0	7.94	211.4	1270	24.99	4.99	30.00	-2.37	1.00

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (R= .04 FT)	STREF (R= .04 FT)
93.3	.023	1.04	3750	2.145E-05	7.513E-08	1.023E 06	1.621E-02	2.666E-02

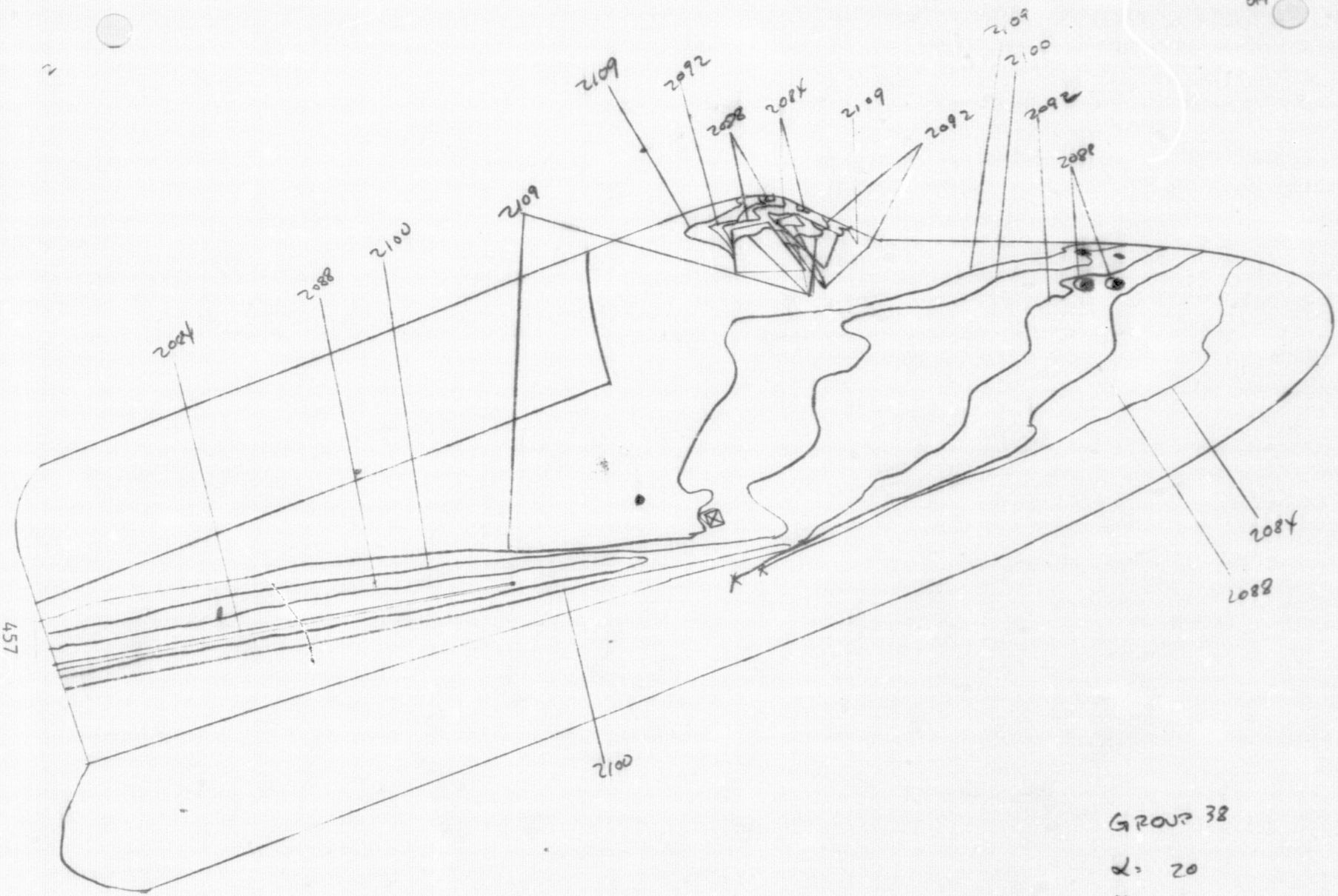
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOX(XR)	TRAP(TO)	BETA(TO)
NOF SIDE(NOS)	7623	113	82	.0486	4.259E-02	3.9053E-02
OP SIDE(OS)	7687	113	82	.0486	4.259E-02	3.9053E-02
BOTTOM(BOT)	8058	113	82	.0486	4.259E-02	3.9053E-02
TOP(TOP)	8039	113	82	.0486	4.259E-02	3.9053E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 7077(113)	30.41	29.44	3.498E-04	.0216	4.272E-04	.0264	4.800E-04	.0296	5.699E-04
OS 2077(113)	30.44	29.47	3.497E-04	.0216	4.270E-04	.0264	4.798E-04	.0296	5.696E-04
HOT 4150(113)	30.44	29.47	3.447E-04	.0216	4.270E-04	.0264	4.798E-04	.0296	5.696E-04
NOS P650(113)	30.44	29.47	3.497E-04	.0216	4.270E-04	.0264	4.798E-04	.0296	5.696E-04
TOP 7078(113)	31.51	30.54	3.434E-04	.0212	4.194E-04	.0259	4.712E-04	.0291	5.590E-04
OS 2078(113)	31.51	30.54	3.434E-04	.0212	4.194E-04	.0259	4.712E-04	.0291	5.590E-04
HOT 4151(113)	31.51	30.54	3.434E-04	.0212	4.194E-04	.0259	4.712E-04	.0291	5.590E-04
NOS P651(113)	31.51	30.54	3.434E-04	.0212	4.194E-04	.0259	4.712E-04	.0291	5.590E-04
TOP 7079(113)	32.59	31.62	3.375E-04	.0208	4.122E-04	.0254	4.632E-04	.0286	5.494E-04
OS 2079(113)	32.61	31.64	3.374E-04	.0208	4.121E-04	.0254	4.630E-04	.0286	5.494E-04
HOT 4152(113)	32.61	31.64	3.374E-04	.0208	4.121E-04	.0254	4.630E-04	.0286	5.494E-04
NOS P652(113)	32.61	31.64	3.374E-04	.0208	4.121E-04	.0254	4.630E-04	.0286	5.494E-04
	33.66		MODEL WAS LEFT CENTERLINE						
TOP 7080(113)	33.69	32.72	3.319E-04	.0205	4.052E-04	.0250	4.553E-04	.0281	5.406E-04
OS 2080(113)	33.69	32.72	3.319E-04	.0205	4.052E-04	.0250	4.553E-04	.0281	5.406E-04
HOT 4153(113)	33.69	32.72	3.319E-04	.0205	4.052E-04	.0250	4.553E-04	.0281	5.406E-04
NOS P653(113)	33.69	32.72	3.319E-04	.0205	4.052E-04	.0250	4.553E-04	.0281	5.406E-04

GROUP 38

α = 20

ψ = 0



GROUP 38

α: 20

ψ: 0

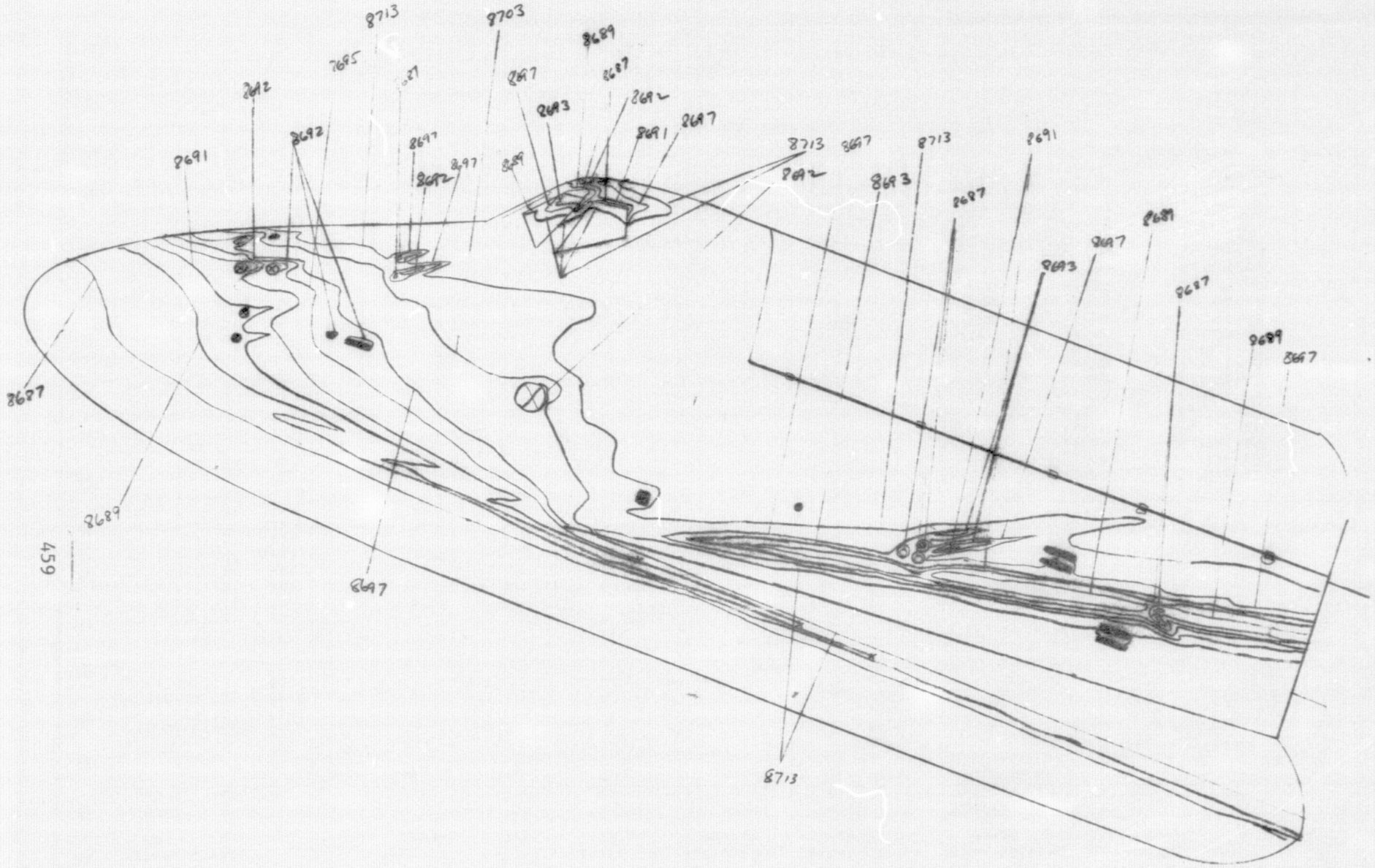
457

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GROUP 38
$\alpha = 20$
$\psi = 0$

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459

GROUP 38

$\alpha = 20$

$\psi = 0$

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NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA576 — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
3A	0	7.94	210.6	1274	20.00	10.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SIREF (R= .04 FT)
93.6	.023	1.0[illegible]	3764	2.031E-05	7.536E-09	1.614E 06	1.619E-02	2.678E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACAK)	THAP(TO)	PETA(TO)
NOF SIDE(NOS)	7499	113	83	.0486	0	0
UP SIDE(US)	7687	113	83	.0486	0	0
BOTTOM(BOT)	8266	113	83	.0486	0	0
TOP(TOP)	8039	150	83	.0505	0	0

PIC NO	TIME DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
US 2081(113)	.03	MODEL HAS NOT REACHED CENTERLINE						
TO 7081(150)	.05	MODEL HAS NOT REACHED CENTERLINE						
NO 8185(113)	.05	MODEL HAS NOT REACHED CENTERLINE						
NO 8185(113)	.05	MODEL HAS NOT REACHED CENTERLINE						
NO 8185(113)	1.19	MODEL HAS NOT REACHED CENTERLINE						
TO 7082(150)	1.13	MODEL HAS NOT REACHED CENTERLINE						
US 2082(113)	1.13	MODEL HAS NOT REACHED CENTERLINE						
NO 8186(113)	1.13	MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME = 1.74								
HOT 4187(113)	2.18	1.18	1.683E-03	.1039	2.052E-03	.1267	2.305E-03	.1423	2.751E-03
TOP 7083(150)	2.20	1.20	4.332E-03	.2490	4.966E-03	.3067	5.616E-03	.3468	6.579E-03
US 2083(113)	2.20	1.20	1.666E-03	.1029	2.031E-03	.1254	2.281E-03	.1409	2.724E-03
NOS 8687(113)	2.20	1.20	1.666E-03	.1029	2.031E-03	.1254	2.281E-03	.1409	2.724E-03
TOP 7084(150)	3.28	2.28	2.430E-03	.1502	3.009E-03	.2227	4.032E-03	.2519	4.775E-03
US 2084(113)	3.28	2.28	1.211E-03	.0747	1.476E-03	.0911	1.658E-03	.1023	1.977E-03
HOT 4188(113)	3.28	2.28	1.211E-03	.0747	1.476E-03	.0911	1.658E-03	.1023	1.977E-03
NOS 8688(113)	3.28	2.28	1.211E-03	.0747	1.476E-03	.0911	1.658E-03	.1023	1.977E-03
TOP 7085(150)	4.36	3.36	2.415E-03	.1491	2.975E-03	.1837	3.365E-03	.2077	3.940E-03
US 2085(113)	4.36	3.36	9.479E-04	.0616	1.216E-03	.0751	1.357E-03	.0844	1.631E-03
HOT 4189(113)	4.36	3.36	9.479E-04	.0616	1.216E-03	.0751	1.357E-03	.0844	1.631E-03
NOS 8689(113)	4.36	3.36	9.479E-04	.0616	1.216E-03	.0751	1.357E-03	.0844	1.631E-03
HOT 4190(113)	5.43	4.43	8.184E-04	.0536	1.059E-03	.0654	1.189E-03	.0734	1.419E-03
TOP 7086(150)	5.46	4.46	2.566E-03	.1294	2.542E-03	.1594	2.930E-03	.1803	3.419E-03
US 2086(113)	5.46	4.46	8.859E-04	.0535	1.056E-03	.0652	1.186E-03	.0732	1.415E-03
NOS 8690(113)	5.46	4.46	8.859E-04	.0535	1.056E-03	.0652	1.186E-03	.0732	1.415E-03
TOP 7087(150)	6.53	5.53	1.891E-03	.1161	2.317E-03	.1430	2.620E-03	.1617	3.067E-03
US 2087(113)	6.53	5.53	7.772E-04	.0480	9.474E-04	.0585	1.064E-03	.0657	1.270E-03
HOT 4191(113)	6.53	5.53	7.772E-04	.0480	9.474E-04	.0585	1.064E-03	.0657	1.270E-03
NOS 8691(113)	6.53	5.53	7.772E-04	.0480	9.474E-04	.0585	1.064E-03	.0657	1.270E-03

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NASA-RI OH50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
38	8	7.94	211.0	1274	20.00	10.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STHEF (R= .04 FT)
93.6	.0023	1.002	3764	2.034E-05	7.537E-08	1.016E 06	1.620E-02	2.669E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCXKX)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7499	113	83	.0486	4.105E-02	3.7622E-02
UP SIDE(US)	7687	113	83	.0486	4.105E-02	3.7622E-02
BOTTOM(BOT)	8246	113	83	.0486	4.105E-02	3.7622E-02
TOP(TOP)	8039	150	83	.0505	9.167E-02	8.7633E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 7048(150)	7.61	6.61	1.721E-03	.1063	2.120E-03	.1309	2.394E-03	.1480	2.808E-03
US 2048(113)	7.61	6.61	7.111E-04	.0439	8.669E-04	.0535	9.739E-04	.0601	1.162E-03
HOT 4152(113)	7.61	6.61	7.111E-04	.0439	8.669E-04	.0535	9.739E-04	.0601	1.162E-03
NOS 8642(113)	7.61	6.61	7.111E-04	.0439	8.669E-04	.0535	9.739E-04	.0601	1.162E-03
HOT 4153(113)	8.62	7.69	8.035E-04	.0497	8.034E-04	.0496	9.032E-04	.0557	1.077E-03
TOP 7049(150)	8.71	7.71	1.594E-03	.0983	1.953E-03	.1211	2.220E-03	.1370	2.597E-03
US 2049(113)	8.71	7.71	8.026E-04	.0496	8.026E-04	.0495	9.017E-04	.0556	1.075E-03
NOS 8643(113)	8.71	7.71	8.026E-04	.0496	8.026E-04	.0495	9.017E-04	.0556	1.075E-03
TOP 7050(150)	9.79	8.79	1.493E-03	.0922	1.839E-03	.1135	2.040E-03	.1284	2.435E-03
US 2050(113)	9.79	8.79	6.161E-04	.0381	7.518E-04	.0464	8.447E-04	.0522	1.008E-03
HOT 4154(113)	9.79	8.79	6.161E-04	.0381	7.518E-04	.0464	8.447E-04	.0522	1.008E-03
NOS 8644(113)	9.79	8.79	6.161E-04	.0381	7.518E-04	.0464	8.447E-04	.0522	1.008E-03
TOP 7051(150)	10.86	9.86	1.495E-03	.0870	1.736E-03	.1071	1.953E-03	.1212	2.297E-03
US 2051(113)	10.85	9.86	5.722E-04	.0359	7.097E-04	.0438	7.973E-04	.0492	9.511E-04
HOT 4155(113)	10.85	9.86	5.722E-04	.0359	7.097E-04	.0438	7.973E-04	.0492	9.511E-04
NOS 8645(113)	10.86	9.86	5.722E-04	.0359	7.097E-04	.0438	7.973E-04	.0492	9.511E-04
TOP 7052(150)	11.96	10.97	1.334E-03	.0825	1.646E-03	.1016	1.862E-03	.1149	2.180E-03
US 2052(113)	11.96	10.97	5.521E-04	.0341	6.731E-04	.0416	7.562E-04	.0467	9.025E-04
HOT 4196(113)	11.96	10.97	5.521E-04	.0341	6.731E-04	.0416	7.562E-04	.0467	9.025E-04
NOS 8646(113)	11.96	10.97	5.521E-04	.0341	6.731E-04	.0416	7.562E-04	.0467	9.025E-04
TOP 7053(150)	13.04	12.04	1.275E-03	.0787	1.571E-03	.0970	1.777E-03	.1097	2.080E-03
US 2053(113)	13.04	12.04	5.263E-04	.0325	6.423E-04	.0397	7.216E-04	.0446	8.612E-04
HOT 4197(113)	13.04	12.04	5.263E-04	.0325	6.423E-04	.0397	7.216E-04	.0446	8.612E-04
NOS 8647(113)	13.04	12.04	5.263E-04	.0325	6.423E-04	.0397	7.216E-04	.0446	8.612E-04
HOT 4198(113)	14.12	13.12	5.065E-04	.0312	6.154E-04	.0380	6.914E-04	.0427	8.251E-04

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NASA-RI 0H50 — AEDC(APO-INC.) ARNOLD AFS, TENNESSEE
VAS2A — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREHEND	ROLL-MODEL	YAW
3R	0	7.94	210.9	1274	20.00	10.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.6	.023	1.001	3764	2.734E-05	7.530E-08	1.616E 06	1.620E-02	2.668E-02

CAPSULA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCAKK)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7499	113	83	.0486	4.105E-02	3.7622E-02
OP SIDE(OS)	7687	113	83	.0486	4.105E-02	3.7622E-02
HOTTOM(HOT)	8246	113	83	.0486	4.105E-02	3.7622E-02
TOP(TOP)	8039	150	83	.0505	9.167E-02	8.7633E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 7054(150)	14.14	13.14	1.221E-03	.0754	1.504E-03	.0928	1.701E-03	.1050	1.991E-03
OS 2054(113)	14.14	13.14	5.43?E-04	.0311	6.140E-04	.0380	6.907E-04	.0426	8.243E-04
NOS 8548(113)	14.14	13.14	5.43?E-04	.0311	6.140E-04	.0380	6.907E-04	.0426	8.243E-04
TOP 7055(150)	15.22	14.22	1.174E-03	.0725	1.440E-03	.0893	1.635E-03	.1009	1.914E-03
OS 2055(113)	15.22	14.22	4.=49E-04	.0299	5.911E-04	.0365	6.641E-04	.0410	7.925E-04
HOT 4149(113)	15.22	14.22	4.=49E-04	.0299	5.911E-04	.0365	6.641E-04	.0410	7.925E-04
NOS 8549(113)	15.22	14.22	4.=49E-04	.0299	5.911E-04	.0365	6.641E-04	.0410	7.925E-04
TOP 7056(150)	16.29	15.30	1.132E-03	.0698	1.390E-03	.0860	1.576E-03	.0973	1.845E-03
OS 2056(113)	16.29	15.30	4.=75E-04	.0285	5.699E-04	.0352	6.403E-04	.0395	7.638E-04
HOT 4210(113)	16.29	15.30	4.=75E-04	.0285	5.699E-04	.0352	6.403E-04	.0395	7.638E-04
NOS 8710(113)	16.29	15.30	4.675E-04	.0285	5.699E-04	.0352	6.403E-04	.0395	7.638E-04
HOT 4211(113)	17.37	16.37	4.=19E-04	.0279	5.504E-04	.0340	6.189E-04	.0382	7.386E-04
TOP 7057(150)	17.40	16.40	1.=93E-03	.0675	1.346E-03	.0831	1.522E-03	.0940	1.782E-03
OS 2057(113)	17.40	16.40	4.=15E-04	.0279	5.504E-04	.0340	6.184E-04	.0382	7.377E-04
NOS 8711(113)	17.40	16.40	4.=15E-04	.0279	5.504E-04	.0340	6.184E-04	.0382	7.377E-04
TOP 7058(150)	18.47	17.47	1.=59E-03	.0653	1.304E-03	.0805	1.475E-03	.0910	1.726E-03
OS 2058(113)	18.47	17.47	4.374E-04	.0270	5.332E-04	.0329	5.991E-04	.0370	7.146E-04
HOT 4212(113)	18.47	17.47	4.374E-04	.0270	5.332E-04	.0329	5.991E-04	.0370	7.146E-04
NOS 8712(113)	18.47	17.47	4.=74E-04	.0270	5.332E-04	.0329	5.991E-04	.0370	7.146E-04
TOP 7059(150)	19.55	18.55	1.=2?E-03	.0634	1.266E-03	.0781	1.431E-03	.0884	1.675E-03
OS 2059(113)	19.55	18.55	4.=45E-04	.0262	5.175E-04	.0319	5.814E-04	.0359	6.936E-04
HOT 4213(113)	19.55	18.55	4.245E-04	.0262	5.175E-04	.0319	5.814E-04	.0359	6.936E-04
NOS 8713(113)	19.55	18.55	4.=45E-04	.0262	5.175E-04	.0319	5.814E-04	.0359	6.936E-04
TOP 7060(150)	20.65	19.65	9.=82E-04	.0616	1.230E-03	.0759	1.391E-03	.0859	1.628E-03
OS 2060(113)	20.65	19.65	4.=25E-04	.0255	5.028E-04	.0310	5.649E-04	.0349	6.742E-04
HOT 4214(113)	20.65	19.65	4.=25E-04	.0255	5.028E-04	.0310	5.649E-04	.0349	6.742E-04
NOS 8714(113)	20.65	19.65	4.=25E-04	.0255	5.028E-04	.0310	5.649E-04	.0349	6.742E-04

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NASA-RI 0H50 — AEDC(APO.INC.) ARNOLD AFS. TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PRESEND	ROLL-MODEL	YAW
38	P	7.94	210.9	1274	20.00	10.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.023	1.071	3704	2.033E-05	7.537E-08	1.016E 06	1.620E-02	2.66RE-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACXX)	TRAN(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	83	.0486	4.105E-02	3.7622E-02
OP SIDE(OS)	7697	113	83	.0486	4.105E-02	3.7622E-02
BOTTOM(BOT)	8246	113	83	.0486	4.105E-02	3.7622E-02
TOP(TOP)	8039	150	83	.0505	9.167E-02	8.7633E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 7101(150)	21.72	20.73	9.720E-04	.0601	1.197E-03	.0739	1.354E-03	.0836	1.586E-03
OS 2101(113)	21.72	20.73	4.316E-04	.0266	4.896E-04	.0302	5.500E-04	.0340	6.564E-04
HOT 4215(113)	21.72	20.73	4.316E-04	.0266	4.896E-04	.0302	5.500E-04	.0340	6.564E-04
NOS 8705(113)	21.72	20.73	4.316E-04	.0266	4.896E-04	.0302	5.500E-04	.0340	6.564E-04
HOT 4206(113)	22.80	21.80	3.916E-04	.0242	4.773E-04	.0295	5.363E-04	.0331	6.400E-04
TOP 7102(150)	22.83	21.83	9.472E-04	.0585	1.167E-03	.0720	1.320E-03	.0814	1.544E-03
OS 2102(113)	22.83	21.83	3.914E-04	.0242	4.771E-04	.0294	5.360E-04	.0331	6.394E-04
NOS 8706(113)	22.83	21.83	3.914E-04	.0242	4.771E-04	.0294	5.360E-04	.0331	6.394E-04
TOP 7103(150)	23.90	22.90	9.247E-04	.0571	1.139E-03	.0703	1.288E-03	.0796	1.509E-03
OS 2103(113)	23.91	22.90	3.820E-04	.0236	4.657E-04	.0288	5.232E-04	.0323	6.247E-04
HOT 4207(113)	23.90	22.90	3.820E-04	.0236	4.657E-04	.0288	5.232E-04	.0323	6.247E-04
NOS 8707(113)	23.90	22.90	3.820E-04	.0236	4.657E-04	.0288	5.232E-04	.0323	6.247E-04
TOP 7104(150)	24.99	23.98	9.037E-04	.0558	1.113E-03	.0687	1.259E-03	.0777	1.475E-03
OS 2104(113)	24.99	23.98	3.734E-04	.0231	4.552E-04	.0281	5.114E-04	.0316	6.106E-04
HOT 4208(113)	24.98	23.98	3.734E-04	.0231	4.552E-04	.0281	5.114E-04	.0316	6.106E-04
NOS 8708(113)	24.98	23.98	3.734E-04	.0231	4.552E-04	.0281	5.114E-04	.0316	6.106E-04
HOT 4209(113)	26.05	25.06	3.653E-04	.0226	4.453E-04	.0275	5.003E-04	.0309	5.973E-04
TOP 7105(150)	26.08	25.08	8.536E-04	.0546	1.086E-03	.0672	1.231E-03	.0760	1.442E-03
OS 2105(113)	26.08	25.08	3.651E-04	.0225	4.450E-04	.0275	5.000E-04	.0309	5.970E-04
NOS 8709(113)	26.08	25.08	3.651E-04	.0225	4.450E-04	.0275	5.000E-04	.0309	5.970E-04
TOP 7106(150)	27.16	26.16	8.653E-04	.0534	1.066E-03	.0658	1.205E-03	.0744	1.411E-03
OS 2106(113)	27.16	26.16	3.575E-04	.0221	4.358E-04	.0269	4.896E-04	.0302	5.840E-04
HOT 4210(113)	27.16	26.16	3.575E-04	.0221	4.358E-04	.0269	4.896E-04	.0302	5.840E-04
NOS 8710(113)	27.16	26.16	3.575E-04	.0221	4.358E-04	.0269	4.896E-04	.0302	5.840E-04
TOP 7107(150)	28.23	27.23	8.456E-04	.0524	1.045E-03	.0645	1.181E-03	.0730	1.385E-03
OS 2107(113)	28.23	27.23	3.504E-04	.0216	4.271E-04	.0264	4.799E-04	.0296	5.732E-04
HOT 4211(113)	28.23	27.23	3.504E-04	.0216	4.271E-04	.0264	4.799E-04	.0296	5.732E-04

NASA-RI OH5C — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA52E — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG F)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
39	0	7.94	210.7	1274	20.00	10.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	D-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	ML-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.6	.023	1.1?0	3?0?	?.?31E-05	7.537E-06	1.?15E 06	1.619E-02	2.67?E-02

CAMERA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACXA)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	83	.0486	4.105E-02	3.7622E-02
OP SIDE(OS)	7687	113	83	.0486	4.105E-02	3.7622E-02
BOTTOM(BOT)	8245	113	83	.0486	4.105E-02	3.7622E-02
TOP(TOP)	8639	150	83	.0505	9.167E-02	8.7633E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 7108(150)	29.31	28.31	8.317E-04	.0513	1.025E-03	.0632	1.159E-03	.0715	1.356E-03
OS 2108(113)	29.31	28.31	3.436E-04	.0212	4.184E-04	.0259	4.706E-04	.0291	5.614E-04
HOT 4212(113)	29.31	28.31	3.436E-04	.0212	4.184E-04	.0259	4.706E-04	.0291	5.614E-04
NOS P711(113)	29.31	28.31	3.436E-04	.0212	4.184E-04	.0259	4.706E-04	.0291	5.614E-04
TOP 7109(150)	30.41	29.41	8.160E-04	.0504	1.005E-03	.0620	1.137E-03	.0702	1.330E-03
OS 2109(113)	30.41	29.41	3.371E-04	.0208	4.110E-04	.0254	4.617E-04	.0285	5.508E-04
HOT 4213(113)	30.41	29.41	3.371E-04	.0208	4.110E-04	.0254	4.617E-04	.0285	5.508E-04
NOS P712(113)	30.41	29.41	3.371E-04	.0208	4.110E-04	.0254	4.617E-04	.0285	5.508E-04
TOP 7110(150)	31.49	30.49	8.115E-04	.0495	9.873E-04	.0610	1.117E-03	.0689	1.307E-03
OS 2110(113)	31.49	30.49	3.311E-04	.0204	4.037E-04	.0249	4.535E-04	.0280	5.413E-04
HOT 4214(113)	31.49	30.49	3.311E-04	.0204	4.037E-04	.0249	4.535E-04	.0280	5.413E-04
NOS P713(113)	31.49	30.49	3.311E-04	.0204	4.037E-04	.0249	4.535E-04	.0280	5.413E-04
TOP 7111(150)	32.56	31.56	7.077E-04	.0436	9.703E-04	.0599	1.097E-03	.0677	1.284E-03
OS 2111(113)	32.56	31.56	3.254E-04	.0201	3.967E-04	.0245	4.457E-04	.0275	5.317E-04
HOT 4215(113)	32.56	31.56	3.254E-04	.0201	3.967E-04	.0245	4.457E-04	.0275	5.317E-04
NOS P714(113)	32.56	31.56	3.254E-04	.0201	3.967E-04	.0245	4.457E-04	.0275	5.317E-04
	33.59		MODEL HAS LEFT CENTERLINE						
TOP 7112(150)	33.66	32.67	7.763E-04	.0478	9.538E-04	.0589	1.079E-03	.0666	1.263E-03
OS 2112(113)	33.66	32.67	3.199E-04	.0198	3.900E-04	.0241	4.382E-04	.0271	5.229E-04
HOT 4216(113)	33.66	32.67	3.199E-04	.0198	3.900E-04	.0241	4.382E-04	.0271	5.229E-04
NOS P715(113)	33.66	32.67	3.199E-04	.0198	3.900E-04	.0241	4.382E-04	.0271	5.229E-04
OS 2113(113)	34.74	33.74	3.148E-04	.0194	3.837E-04	.0237	4.311E-04	.0266	5.142E-04
HOT 4217(113)	34.74	33.74	3.148E-04	.0194	3.837E-04	.0237	4.311E-04	.0266	5.142E-04
NOS P716(113)	34.74	33.74	3.148E-04	.0194	3.837E-04	.0237	4.311E-04	.0266	5.142E-04
TOP 7113(150)	34.74	33.77	7.616E-04	.0470	9.391E-04	.0579	1.061E-03	.0655	1.241E-03

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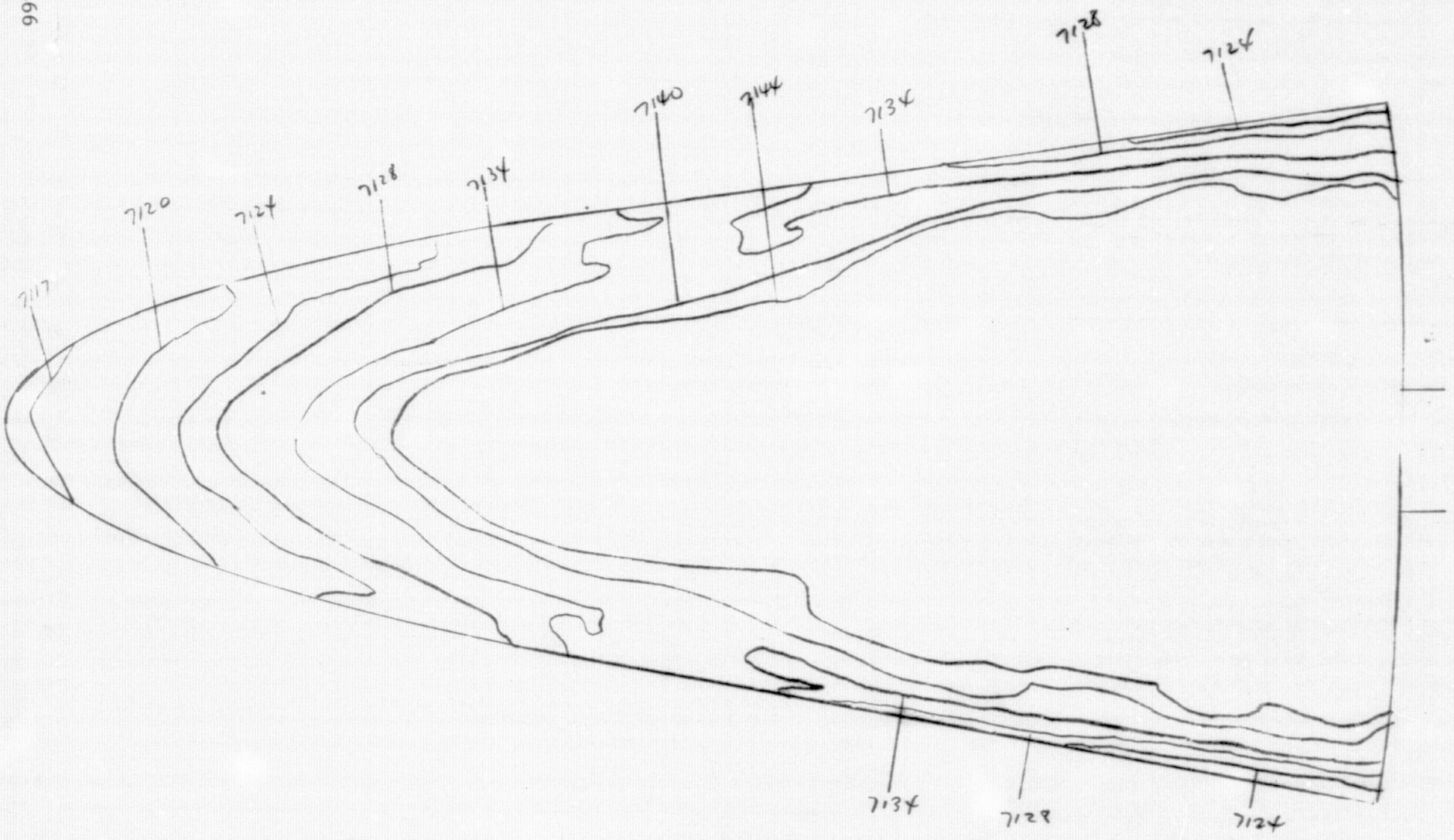
NASA-RT 0450 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL R

ORCUE	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
38	0	7.94	211.1	1274	20.00	10.00	30.00	0	0

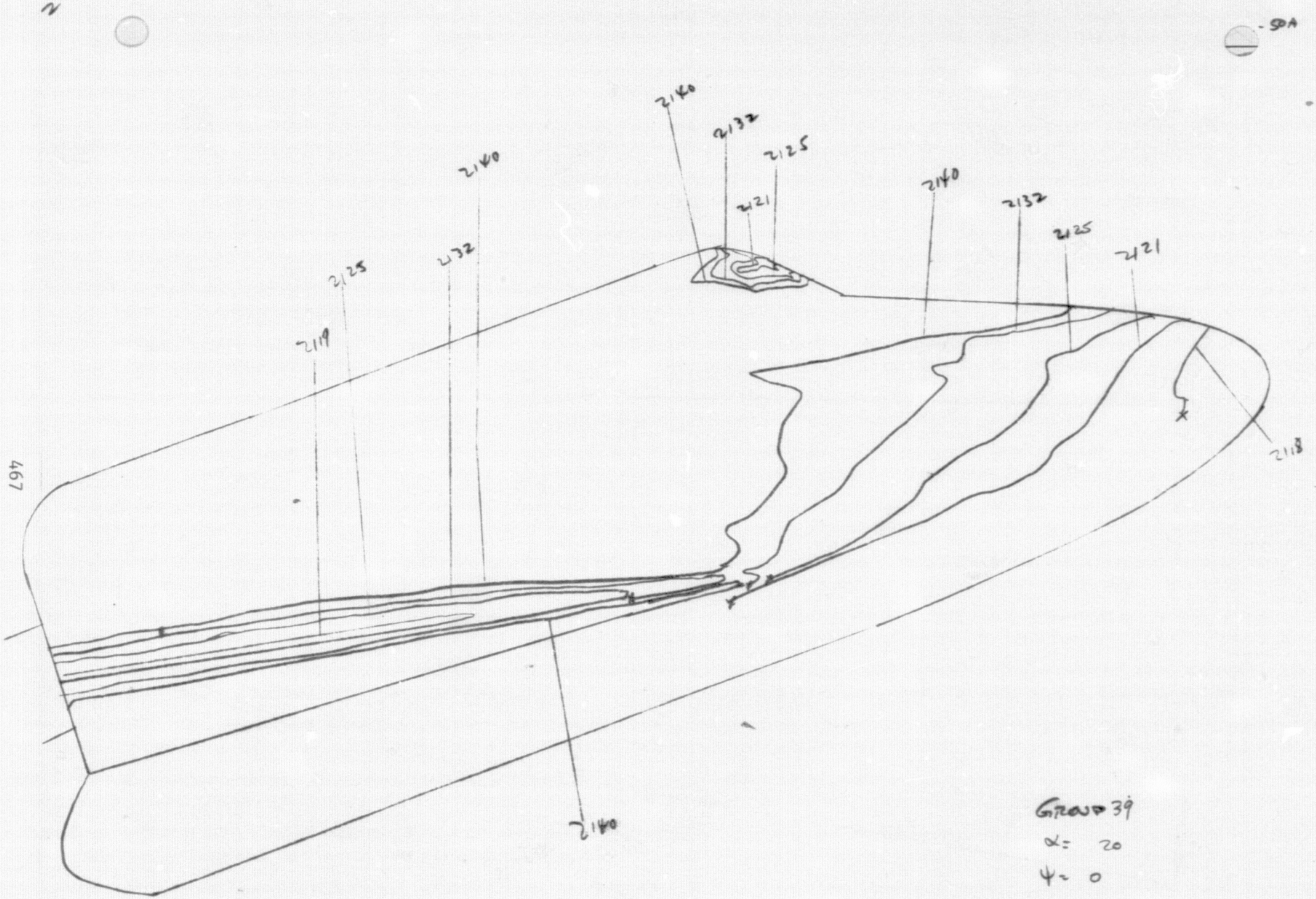
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.023	1.0?2	3704	2.035E-05	7.537E-07	1.017E 06	1.620E-02	2.667E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACAK)	THAR(TO)	BETA(TO)
NOF SIDE(NOS)	7499	113	83	.0486	4.105E-02	3.7622E-02
OP SIDE(OS)	7697	113	83	.0486	4.105E-02	3.7622E-02
BOTTOM(BOT)	8246	113	83	.0486	4.105E-02	3.7622E-02
TOP(TOP)	8039	150	83	.0505	9.167E-02	8.7633E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
NOT 4218(113)	35.82	34.82	3.[illegible]98E-04	.0191	3.771E-04	.0233	4.244E-04	.0262	5.067E-04
TOP 7114(150)	35.84	34.84	7.[illegible]87E-04	.0463	9.235E-04	.0570	1.044E-03	.0645	1.224E-03
OS 7114(113)	35.86	34.84	3.[illegible]49E-04	.0191	3.776E-04	.0233	4.242E-04	.0262	5.066E-04
NOS 8717(113)	35.86	34.84	3.[illegible]98E-04	.0191	3.776E-04	.0233	4.242E-04	.0262	5.066E-04



GROUP 39
$\alpha = 20$
$\psi = 0$



GROUP 39
$\alpha = 20$
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GROUP 39

$\alpha = 20$

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NASA-RI 0N60 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL R

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
39	0	7.96	210.8	1277	20.01	9.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.8	.023	1.061	3704	2.332E-05	7.555E-08	1.011E 06	1.620E-02	2.673E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAR)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7999	113	79	.0486	0	0
OP SIDE(OS)	7687	113	79	.0486	0	0
BOTTOM(BOT)	8246	113	79	.0486	0	0
TOP(TOP)	8039	150	79	.0505	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TO 7115(150)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 2115(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 4219(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 8719(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 7116(150)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 2116(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 4220(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 8720(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME = 1.75									
TOP 7117(150)	2.18	1.19	4.267E-03	.2634	5.251E-03	.3241	5.938E-03	.3666	6.971E-03
OS 2117(113)	2.18	1.19	1.885E-03	.1163	2.297E-03	.1418	2.579E-03	.1592	3.085E-03
NOT 4221(113)	2.18	1.19	1.885E-03	.1163	2.297E-03	.1418	2.579E-03	.1592	3.085E-03
NOS 8721(113)	2.18	1.19	1.885E-03	.1163	2.297E-03	.1418	2.579E-03	.1592	3.085E-03
TOP 7118(150)	3.25	2.27	3.446E-03	.1910	3.808E-03	.2351	4.307E-03	.2658	5.055E-03
OS 2118(113)	3.25	2.27	1.567E-03	.0844	1.666E-03	.1028	1.871E-03	.1155	2.237E-03
NOT 4222(113)	3.25	2.27	1.567E-03	.0844	1.666E-03	.1028	1.871E-03	.1155	2.237E-03
NOS 8722(113)	3.25	2.27	1.567E-03	.0844	1.666E-03	.1028	1.871E-03	.1155	2.237E-03
NOT 4223(113)	4.33	3.35	1.126E-03	.0695	1.372E-03	.0847	1.541E-03	.0951	1.843E-03
TOP 7119(150)	4.36	3.37	2.533E-03	.1567	3.125E-03	.1929	3.534E-03	.2181	4.148E-03
OS 2119(113)	4.36	3.37	1.122E-03	.0692	1.367E-03	.0844	1.535E-03	.0948	1.836E-03
NOS 8723(113)	4.36	3.37	1.122E-03	.0692	1.367E-03	.0844	1.535E-03	.0948	1.836E-03
TOP 7120(150)	5.43	4.45	2.211E-03	.1365	2.720E-03	.1680	3.077E-03	.1900	3.613E-03
OS 2120(113)	5.43	4.45	9.764E-04	.0603	1.190E-03	.0735	1.336E-03	.0825	1.599E-03
NOT 4224(113)	5.43	4.45	9.764E-04	.0603	1.190E-03	.0735	1.336E-03	.0825	1.599E-03
NOS 8724(113)	5.43	4.45	9.764E-04	.0603	1.190E-03	.0735	1.336E-03	.0825	1.599E-03
TOP 7121(150)	6.51	5.52	1.992E-03	.1225	2.441E-03	.1507	2.761E-03	.1704	3.241E-03
OS 2121(113)	6.51	5.52	8.762E-04	.0541	1.066E-03	.0659	1.199E-03	.0740	1.434E-03
NOT 4225(113)	6.51	5.52	8.762E-04	.0541	1.066E-03	.0659	1.199E-03	.0740	1.434E-03
NOS 8725(113)	6.51	5.52	8.762E-04	.0541	1.066E-03	.0659	1.199E-03	.0740	1.434E-03

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NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VASP6 — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
39	0	7.94	210.8	1277	20.01	9.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.4	.023	1.051	3764	2.122E-04	7.554E-08	1.012E 06	1.620E-02	2.673E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACAR)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7499	113	79	.0486	4.607E-02	4.2372E-02
OR SIDE(OS)	7487	113	79	.0486	4.607E-02	4.2372E-02
BOTTOM(BOT)	8246	113	79	.0486	4.607E-02	4.2372E-02
TOP(TOP)	8039	150	79	.0505	9.421E-02	9.232SE-02

PIC NO	TIME	DELTIME	H(10)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 7122(150)	7.61	6.63	1.311E-03	.1118	2.229E-03	.1376	2.521E-03	.1556	2.959E-03
OS 2122(113)	7.61	6.63	8.006E-04	.0494	9.751E-04	.0602	1.095E-03	.0676	1.310E-03
HOT 4226(113)	7.61	6.63	8.006E-04	.0494	9.751E-04	.0602	1.095E-03	.0676	1.310E-03
NOS 8726(113)	7.61	6.63	8.006E-04	.0494	9.751E-04	.0602	1.095E-03	.0676	1.310E-03
TOP 7123(150)	8.66	7.70	1.588E-03	.1038	2.067E-03	.1277	2.338E-03	.1444	2.747E-03
OS 2123(113)	8.69	7.70	7.420E-04	.0458	9.044E-04	.0559	1.016E-03	.0627	1.216E-03
HOT 4227(113)	8.69	7.70	7.420E-04	.0458	9.044E-04	.0559	1.016E-03	.0627	1.216E-03
NOS 8727(113)	8.69	7.70	7.420E-04	.0458	9.044E-04	.0559	1.016E-03	.0627	1.216E-03
HOT 4228(113)	9.78	8.78	6.451E-04	.0429	8.471E-04	.0523	9.513E-04	.0587	1.139E-03
TOP 7124(150)	9.79	8.80	1.571E-03	.0978	1.934E-03	.1194	2.167E-03	.1350	2.568E-03
OS 2124(113)	9.79	8.80	6.941E-04	.0429	8.454E-04	.0522	9.500E-04	.0567	1.137E-03
NOS 8728(113)	9.79	8.80	6.941E-04	.0429	8.454E-04	.0522	9.500E-04	.0587	1.137E-03
TOP 7125(150)	10.86	9.88	1.483E-03	.0916	1.825E-03	.1128	2.044E-03	.1275	2.427E-03
OS 2125(113)	10.86	9.88	6.552E-04	.0405	7.985E-04	.0493	8.967E-04	.0554	1.074E-03
HOT 4229(113)	10.86	9.88	6.552E-04	.0405	7.985E-04	.0493	8.967E-04	.0554	1.074E-03
NOS 8729(113)	10.86	9.88	6.552E-04	.0405	7.985E-04	.0493	8.967E-04	.0554	1.074E-03
HOT 4230(113)	11.94	10.96	6.222E-04	.0384	7.583E-04	.0468	8.515E-04	.0526	1.019E-03
TOP 7126(150)	11.96	10.98	1.407E-03	.0869	1.731E-03	.1069	1.958E-03	.1209	2.301E-03
OS 2126(113)	11.96	10.98	6.215E-04	.0384	7.574E-04	.0468	8.506E-04	.0525	1.018E-03
NOS 8730(113)	11.96	10.98	6.215E-04	.0384	7.574E-04	.0468	8.506E-04	.0525	1.018E-03
TOP 7127(150)	13.04	12.06	1.343E-03	.0829	1.652E-03	.1020	1.869E-03	.1154	2.195E-03
OS 2127(113)	13.04	12.06	5.931E-04	.0366	7.228E-04	.0446	8.117E-04	.0501	9.713E-04
HOT 4231(113)	13.04	12.06	5.931E-04	.0366	7.228E-04	.0446	8.117E-04	.0501	9.713E-04
NOS 8731(113)	13.04	12.06	5.931E-04	.0366	7.228E-04	.0446	8.117E-04	.0501	9.713E-04
TOP 7128(150)	14.12	13.13	1.287E-03	.0795	1.583E-03	.0978	1.791E-03	.1106	2.104E-03
OS 2128(113)	14.12	13.13	5.682E-04	.0351	6.926E-04	.0428	7.777E-04	.0480	9.311E-04
HOT 4232(113)	14.12	13.13	5.682E-04	.0351	6.926E-04	.0428	7.777E-04	.0480	9.311E-04
NOS 8732(113)	14.12	13.13	5.682E-04	.0351	6.926E-04	.0428	7.777E-04	.0480	9.311E-04

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NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA576 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
39	0	7.94	210.6	1277	20.01	9.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (R= .04 FT)	STREF (R= .04 FT)
93.8	.0224	1.010	3764	2.026E-05	7.555E-08	1.611E 06	1.619E-02	2.674E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACAK)	TRAN(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	79	.0486	4.607E-02	4.2372E-02
OP SIDE(OS)	7687	113	79	.0486	4.607E-02	4.2372E-02
BOTTOM(BOT)	8246	113	79	.0486	4.607E-02	4.2372E-02
TOP(TOP)	8039	150	79	.0505	9.621E-02	9.2325E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 7129(150)	15.22	14.23	1.234E-03	.0763	1.521E-03	.0939	1.720E-03	.1062	2.021E-03
OS 2129(113)	15.22	14.23	5.459E-04	.0337	6.652E-04	.0411	7.470E-04	.0461	8.944E-04
BOT 4233(113)	15.22	14.23	5.459E-04	.0337	6.652E-04	.0411	7.470E-04	.0461	8.944E-04
NOS 8733(113)	15.22	14.23	5.459E-04	.0337	6.652E-04	.0411	7.470E-04	.0461	8.944E-04
TOP 7130(150)	16.29	15.31	1.192E-03	.0736	1.466E-03	.0906	1.658E-03	.1024	1.949E-03
OS 2130(113)	16.29	15.31	5.263E-04	.0325	6.414E-04	.0396	7.203E-04	.0445	8.623E-04
BOT 4234(113)	16.29	15.31	5.263E-04	.0325	6.414E-04	.0396	7.203E-04	.0445	8.623E-04
NOS 8734(113)	16.29	15.31	5.263E-04	.0325	6.414E-04	.0396	7.203E-04	.0445	8.623E-04
BOT 4235(113)	17.37	16.39	5.087E-04	.0314	6.200E-04	.0383	6.963E-04	.0430	8.335E-04
TOP 7131(150)	17.40	16.41	1.151E-03	.0711	1.416E-03	.0875	1.602E-03	.0989	1.882E-03
OS 2131(113)	17.40	16.41	5.088E-04	.0314	6.195E-04	.0383	6.957E-04	.0430	8.329E-04
NOS 8735(113)	17.40	16.41	5.088E-04	.0314	6.195E-04	.0383	6.957E-04	.0430	8.329E-04
TOP 7132(150)	18.47	17.49	1.119E-03	.0688	1.372E-03	.0847	1.552E-03	.0958	1.822E-03
OS 2132(113)	18.47	17.49	4.924E-04	.0304	6.002E-04	.0371	6.740E-04	.0416	8.065E-04
BOT 4236(113)	18.47	17.49	4.924E-04	.0304	6.002E-04	.0371	6.740E-04	.0416	8.065E-04
NOS 8736(113)	18.47	17.49	4.924E-04	.0304	6.002E-04	.0371	6.740E-04	.0416	8.065E-04
OS 2133(113)	19.55	18.56	4.779E-04	.0295	5.825E-04	.0360	6.541E-04	.0404	7.831E-04
BOT 4237(113)	19.55	18.56	4.779E-04	.0295	5.825E-04	.0360	6.541E-04	.0404	7.831E-04
NOS 8737(113)	19.55	18.56	4.779E-04	.0295	5.825E-04	.0360	6.541E-04	.0404	7.831E-04
TOP 7133(150)	19.57	18.59	1.081E-03	.0668	1.331E-03	.0822	1.505E-03	.0929	1.768E-03
TOP 7134(150)	20.65	19.67	1.051E-03	.0649	1.294E-03	.0799	1.463E-03	.0904	1.719E-03
OS 2134(113)	20.65	19.67	4.644E-04	.0287	5.660E-04	.0350	6.356E-04	.0393	7.609E-04
BOT 4238(113)	20.65	19.67	4.644E-04	.0287	5.660E-04	.0350	6.356E-04	.0393	7.609E-04
NOS 8738(113)	20.65	19.67	4.644E-04	.0287	5.660E-04	.0350	6.356E-04	.0393	7.609E-04
TOP 7135(150)	21.72	20.74	1.024E-03	.0632	1.260E-03	.0778	1.425E-03	.0880	1.674E-03
OS 2135(113)	21.72	20.74	4.522E-04	.0279	5.511E-04	.0340	6.189E-04	.0382	7.409E-04
BOT 4239(113)	21.72	20.74	4.522E-04	.0279	5.511E-04	.0340	6.189E-04	.0382	7.409E-04
NOS 8739(113)	21.72	20.74	4.522E-04	.0279	5.511E-04	.0340	6.189E-04	.0382	7.409E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

NASA-RI 0H50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
39	0	7.94	210.6	1277	20.01	9.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.8	.023	1.000	3769	2.026E-05	7.555E-08	1.810E 06	1.619E-02	2.674E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOF SIDE(NOS)	7499	113	79	.0486	4.607E-02	4.2372E-02
UP SIDE(OS)	7687	113	79	.0486	4.607E-02	4.2372E-02
BOTTOM(BOT)	8246	113	79	.0486	4.607E-02	4.2372E-02
TOP(TOP)	8039	150	79	.0505	9.621E-02	9.2325E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	SI(TO)
TOP 7136(150)	22.83	21.84	9.976E-04	.0616	1.228E-03	.0758	1.348E-03	.0857	1.631E-03
OS 2136(113)	22.83	21.84	4.406E-04	.0272	5.370E-04	.0332	6.031E-04	.0372	7.216E-04
BOT 4240(113)	22.83	21.84	4.406E-04	.0272	5.370E-04	.0332	6.031E-04	.0372	7.216E-04
NOS 8740(113)	22.83	21.84	4.406E-04	.0272	5.370E-04	.0332	6.031E-04	.0372	7.216E-04
TOP 7137(150)	23.90	22.92	9.739E-04	.0601	1.198E-03	.0740	1.355E-03	.0837	1.592E-03
OS 2137(113)	23.90	22.92	4.301E-04	.0266	5.242E-04	.0324	5.867E-04	.0363	7.045E-04
BOT 4241(113)	23.90	22.92	4.301E-04	.0266	5.242E-04	.0324	5.867E-04	.0363	7.045E-04
NOS 8741(113)	23.90	22.92	4.301E-04	.0266	5.242E-04	.0324	5.867E-04	.0363	7.045E-04
BOT 4242(113)	24.98	24.00	4.204E-04	.0260	5.124E-04	.0316	5.754E-04	.0355	6.892E-04
TOP 7138(150)	25.00	24.02	9.513E-04	.0587	1.171E-03	.0723	1.324E-03	.0817	1.555E-03
OS 2138(113)	25.00	24.02	4.202E-04	.0259	5.121E-04	.0316	5.751E-04	.0355	6.882E-04
NOS 8742(113)	25.00	24.02	4.202E-04	.0259	5.121E-04	.0316	5.751E-04	.0355	6.882E-04
TOP 7139(150)	26.08	25.10	9.307E-04	.0574	1.145E-03	.0707	1.295E-03	.0800	1.520E-03
OS 2139(113)	26.08	25.10	4.111E-04	.0254	5.010E-04	.0309	5.626E-04	.0347	6.729E-04
BOT 4243(113)	26.08	25.10	4.111E-04	.0254	5.010E-04	.0309	5.626E-04	.0347	6.729E-04
NOS 8743(113)	26.08	25.10	4.111E-04	.0254	5.010E-04	.0309	5.626E-04	.0347	6.729E-04
TOP 7140(150)	27.16	26.17	9.114E-04	.0563	1.121E-03	.0692	1.268E-03	.0783	1.489E-03
OS 2140(113)	27.16	26.17	4.125E-04	.0255	4.906E-04	.0303	5.509E-04	.0340	6.590E-04
BOT 4244(113)	27.16	26.17	4.125E-04	.0255	4.906E-04	.0303	5.509E-04	.0340	6.590E-04
NOS 8744(113)	27.16	26.17	4.125E-04	.0255	4.906E-04	.0303	5.509E-04	.0340	6.590E-04
TOP 7141(150)	28.26	27.27	8.928E-04	.0551	1.099E-03	.0678	1.242E-03	.0767	1.459E-03
OS 2141(113)	28.26	27.27	3.943E-04	.0243	4.806E-04	.0297	5.397E-04	.0333	6.458E-04
BOT 4245(113)	28.26	27.27	3.943E-04	.0243	4.806E-04	.0297	5.397E-04	.0333	6.458E-04
NOS 8745(113)	28.26	27.27	3.943E-04	.0243	4.806E-04	.0297	5.397E-04	.0333	6.458E-04
TOP 7142(150)	29.33	28.35	8.757E-04	.0540	1.078E-03	.0665	1.219E-03	.0752	1.430E-03
OS 2142(113)	29.33	28.35	3.868E-04	.0239	4.714E-04	.0291	5.293E-04	.0327	6.328E-04
BOT 4246(113)	29.33	28.35	3.868E-04	.0239	4.714E-04	.0291	5.293E-04	.0327	6.328E-04
NOS 8746(113)	29.33	28.35	3.868E-04	.0239	4.714E-04	.0291	5.293E-04	.0327	6.328E-04

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4/10/74

NASA-RI OHED

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

NAS26

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
39	9	7.04	210.9	1277	20.01	9.09	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	AREF (AE= .04 FT)	SREF (AE= .04 FT)
93.8	.023	1.071	3764	2.228E-05	7.550E-08	1.512E 06	1.620E-02	2.672E-02

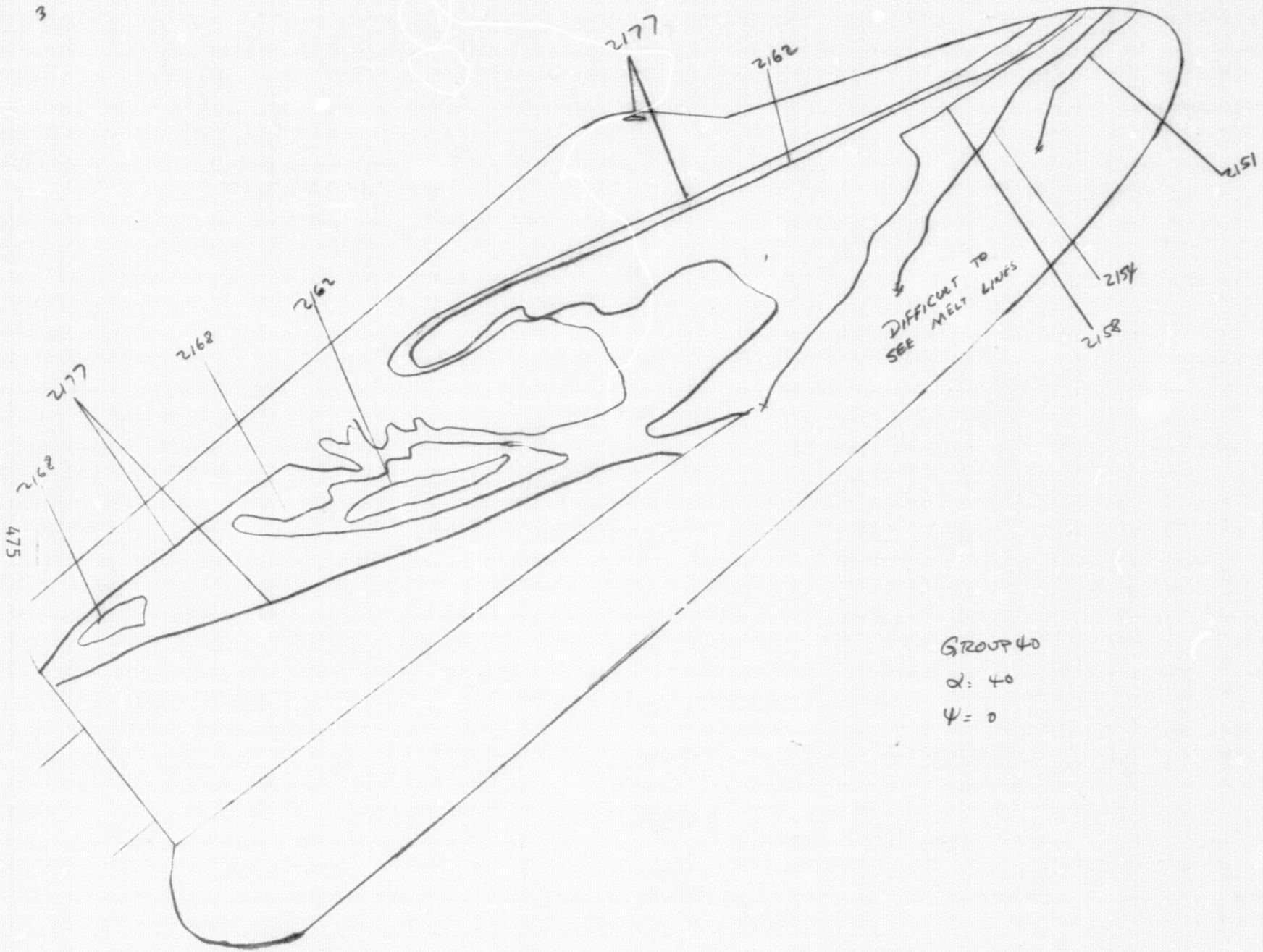
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE PONT (RHOXCXK)	TRAP(TO)	BETA(TO)
NOR SIDE(NOS)	7499	113	79	.0486	4.607E-02	4.2372E-02
UP SIDE(US)	7687	113	79	.0486	4.607E-02	4.2372E-02
BOTTOM(BOT)	8246	113	79	.0486	4.607E-02	4.2372E-02
TOP(TOP)	8039	153	79	.0505	9.621E-02	9.2325E-02

PIC NO	TIME RELTIVE		H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
US 2143(113)	30.41	29.43	3.796E-04	.0234	4.627E-04	.0286	5.196E-04	.0321	6.214E-04
BOT 4247(113)	30.41	29.43	3.796E-04	.0234	4.627E-04	.0286	5.196E-04	.0321	6.214E-04
TOP 7143(150)	30.44	29.45	8.591E-04	.0530	1.057E-03	.0652	1.196E-03	.0738	1.403E-03
NOS 8747(113)	30.44	29.45	3.795E-04	.0234	4.625E-04	.0285	5.193E-04	.0321	6.209E-04
TOP 7144(150)	31.51	30.53	8.439E-04	.0521	1.038E-03	.0641	1.174E-03	.0725	1.379E-03
US 2144(113)	31.51	30.53	3.727E-04	.0230	4.542E-04	.0280	5.101E-04	.0315	6.104E-04
BOT 4248(113)	31.51	30.53	3.727E-04	.0230	4.542E-04	.0280	5.101E-04	.0315	6.104E-04
NOS 8748(113)	31.51	30.53	3.727E-04	.0230	4.542E-04	.0280	5.101E-04	.0315	6.104E-04
TOP 7145(150)	32.59	31.60	8.294E-04	.0512	1.021E-03	.0630	1.154E-03	.0712	1.354E-03
US 2145(113)	32.59	31.60	3.663E-04	.0226	4.464E-04	.0275	5.014E-04	.0309	5.991E-04
BOT 4249(113)	32.59	31.60	3.663E-04	.0226	4.464E-04	.0275	5.014E-04	.0309	5.991E-04
NOS 8749(113)	32.59	31.60	3.663E-04	.0226	4.464E-04	.0275	5.014E-04	.0309	5.991E-04
	33.54		MODEL HAS LEFT CENTERLINE						
TOP 7146(150)	33.66	32.68	8.156E-04	.0503	1.004E-03	.0619	1.135E-03	.0700	1.332E-03
US 2146(113)	33.66	32.68	3.602E-04	.0222	4.390E-04	.0271	4.930E-04	.0304	5.894E-04
BOT 4250(113)	33.69	32.71	3.601E-04	.0222	4.389E-04	.0271	4.928E-04	.0304	5.889E-04
NOS 8750(113)	33.69	32.71	3.601E-04	.0222	4.389E-04	.0271	4.928E-04	.0304	5.889E-04
TOP 7147(150)	34.76	33.78	8.122E-04	.0495	9.871E-04	.0609	1.116E-03	.0689	1.309E-03
US 2147(113)	34.76	33.78	3.563E-04	.0219	4.316E-04	.0266	4.849E-04	.0299	5.795E-04
BOT 4251(113)	34.76	33.78	3.563E-04	.0219	4.316E-04	.0266	4.849E-04	.0299	5.795E-04
NOS 8751(113)	34.76	33.78	3.563E-04	.0219	4.316E-04	.0266	4.849E-04	.0299	5.795E-04

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

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$\Psi = 0$

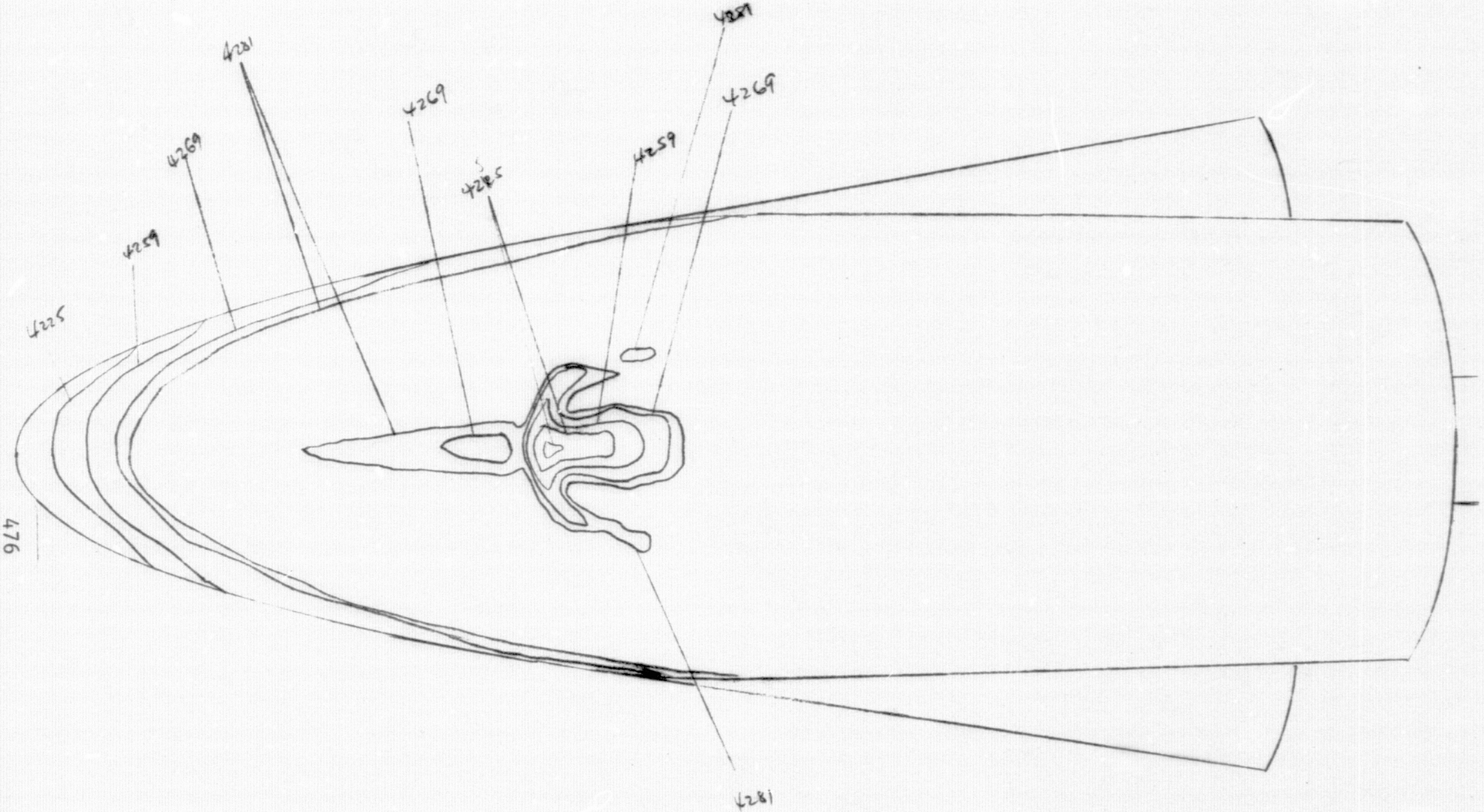
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GROUP 40

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GROUP 40

$\alpha = 40$

$\Psi = 0$

4/10/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

NA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREHEND	ROLL-MODEL	YAW
40	0	7.94	211.0	1275	40.01	12.99	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.023	1.002	3766	2.432E-05	7.544E-08	1.015E 06	1.620E-02	2.669E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAN(TO)	BETA(TO)
NOR SIDE(NOS)	7499	113	82	.0486	0	0
UP SIDE(US)	7687	113	82	.0486	0	0
BOTTOM(BOT)	8246	113	82	.0486	0	0
TOP(TOP)	8639	194	82	.0526	0	0

PIC NO	TIME DELTIME		H(TO)	H(TO)/HREF	H(.910)	H(.91TO)/HREF	H(.93*TO)	H(.93*TO)/HREF	ST(TO)
TO 7148(194)	.03		MODEL HAS NOT REACHED CENTERLINE						
US 2145(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
BO 4252(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 8752(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 7149(194)	1.10		MODEL HAS NOT REACHED CENTERLINE						
US 2149(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 4253(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 8753(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.75								
TOP 7150(194)	2.18	1.19	7.428E-03	.6584	9.270E-03	.5721	1.068E-02	.6532	1.209E-02
US 2150(113)	2.18	1.19	1.724E-03	.1064	2.104E-03	.1298	2.363E-03	.1458	2.818E-03
BOT 4254(113)	2.18	1.19	1.724E-03	.1064	2.104E-03	.1298	2.363E-03	.1458	2.818E-03
NOS 8754(113)	2.18	1.19	1.724E-03	.1064	2.104E-03	.1298	2.363E-03	.1458	2.818E-03
TOP 7151(194)	3.25	2.27	5.387E-03	.3324	6.723E-03	.4149	7.676E-03	.4737	8.764E-03
US 2151(113)	3.25	2.27	1.250E-03	.0772	1.525E-03	.0941	1.714E-03	.1058	2.044E-03
BOT 4255(113)	3.25	2.27	1.250E-03	.0772	1.525E-03	.0941	1.714E-03	.1058	2.044E-03
NOS 8755(113)	3.25	2.27	1.250E-03	.0772	1.525E-03	.0941	1.714E-03	.1058	2.044E-03
TOP 7152(194)	4.36	3.37	4.420E-03	.2728	5.517E-03	.3405	6.299E-03	.3887	7.192E-03
US 2152(113)	4.36	3.37	1.026E-03	.0633	1.252E-03	.0773	1.406E-03	.0868	1.677E-03
BOT 4256(113)	4.36	3.37	1.026E-03	.0633	1.252E-03	.0773	1.406E-03	.0868	1.677E-03
NOS 8756(113)	4.36	3.37	1.026E-03	.0633	1.252E-03	.0773	1.406E-03	.0868	1.677E-03
US 2153(113)	5.43	4.45	8.934E-04	.0551	1.090E-03	.0673	1.224E-03	.0756	1.460E-03
BOT 4257(113)	5.43	4.45	8.934E-04	.0551	1.090E-03	.0673	1.224E-03	.0756	1.460E-03
NOS 8757(113)	5.43	4.45	8.934E-04	.0551	1.090E-03	.0673	1.224E-03	.0756	1.460E-03
TOP 7153(194)	5.48	4.47	3.838E-03	.2369	4.790E-03	.2957	5.468E-03	.3376	6.247E-03
BOT 4258(113)	6.51	5.52	9.116E-04	.0495	9.774E-04	.0604	1.099E-03	.0678	1.310E-03

REPRODUCED AT THE GOVERNMENT EXPENSE

4/10/74

NASA-RI 0H50

VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
40	0	7.94	210.9	1275	40.01	12.99	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	MREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.025	1.201	3765	2.332E-05	7.580E-09	1.015E 06	1.620E-02	2.060E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7499	113	82	.0486	4.229E-02	3.8767E-02
OP SIDE(OS)	7687	113	82	.0496	4.229E-02	3.8767E-02
BOTTOM(BOT)	8246	113	82	.0496	4.229E-02	3.8767E-02
TOP(TOP)	6039	194	82	.0526	1.528E-01	1.5429E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
TOP 7154(194)	6.53	5.65	3.445E-03	.2127	4.300E-03	.2655	4.910E-03	.3031	5.609E-03
OS 2154(113)	6.53	5.65	7.998E-04	.0494	9.757E-04	.0602	1.096E-03	.0677	1.308E-03
NOS 8758(113)	6.53	5.65	7.998E-04	.0494	9.757E-04	.0602	1.096E-03	.0677	1.308E-03
TOP 7155(194)	7.61	6.63	3.153E-03	.1946	3.935E-03	.2429	4.493E-03	.2773	5.130E-03
OS 2155(113)	7.61	6.63	7.320E-04	.0452	8.930E-04	.0551	1.003E-03	.0619	1.196E-03
HOT 4259(113)	7.61	6.63	7.320E-04	.0452	8.930E-04	.0551	1.003E-03	.0619	1.196E-03
NOS 8759(113)	7.61	6.63	7.320E-04	.0452	8.930E-04	.0551	1.003E-03	.0619	1.196E-03
TOP 7156(194)	8.68	7.70	2.825E-03	.1805	3.650E-03	.2253	4.107E-03	.2573	4.761E-03
OS 2156(113)	8.68	7.70	6.789E-04	.0419	8.282E-04	.0511	9.304E-04	.0574	1.110E-03
HOT 4260(113)	8.68	7.70	6.789E-04	.0419	8.282E-04	.0511	9.304E-04	.0574	1.110E-03
NOS 8760(113)	8.68	7.70	6.789E-04	.0419	8.282E-04	.0511	9.304E-04	.0574	1.110E-03
TOP 7157(194)	9.79	8.80	2.735E-03	.1685	3.414E-03	.2104	3.848E-03	.2407	4.455E-03
OS 2157(113)	9.79	8.80	6.350E-04	.0392	7.747E-04	.0478	8.703E-04	.0537	1.039E-03
HOT 4261(113)	9.79	8.80	6.350E-04	.0392	7.747E-04	.0478	8.703E-04	.0537	1.039E-03
NOS 8761(113)	9.79	8.80	6.350E-04	.0392	7.747E-04	.0478	8.703E-04	.0537	1.039E-03
TOP 7158(194)	10.86	9.88	2.582E-03	.1594	3.223E-03	.1989	3.680E-03	.2271	4.201E-03
OS 2158(113)	10.86	9.88	5.994E-04	.0370	7.313E-04	.0451	8.215E-04	.0507	9.796E-04
HOT 4262(113)	10.86	9.88	5.994E-04	.0370	7.313E-04	.0451	8.215E-04	.0507	9.796E-04
NOS 8762(113)	10.86	9.88	5.994E-04	.0370	7.313E-04	.0451	8.215E-04	.0507	9.796E-04
HOT 42C3(113)	11.94	10.96	5.692E-04	.0351	6.944E-04	.0429	7.801E-04	.0482	9.312E-04
TOP 7159(194)	11.96	10.98	2.448E-03	.1512	3.057E-03	.1887	3.440E-03	.2154	3.987E-03
OS 2159(113)	11.96	10.98	5.686E-04	.0351	6.930E-04	.0428	7.792E-04	.0481	9.297E-04
NOS 8763(113)	11.96	10.98	5.686E-04	.0351	6.930E-04	.0428	7.792E-04	.0481	9.297E-04
TOP 7160(194)	13.04	12.06	2.337E-03	.1443	2.917E-03	.1801	3.331E-03	.2057	3.807E-03
OS 2160(113)	13.04	12.06	5.426E-04	.0335	6.619E-04	.0409	7.436E-04	.0459	8.876E-04
HOT 4264(113)	13.04	12.06	5.426E-04	.0335	6.619E-04	.0409	7.436E-04	.0459	8.876E-04
NOS 8764(113)	13.04	12.06	5.426E-04	.0335	6.619E-04	.0409	7.436E-04	.0459	8.876E-04

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NASA-RI ONERA — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VAS2E

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREHEND	ROLL-MODEL	YAW
40	0	7.94	210.8	1275	40.01	12.99	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.0224	1.01	3760	2.031E-05	7.543E-08	1.014E 06	1.620E-02	2.670E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACXR)	THAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	82	.0486	4.229E-02	3.8767E-02
OP SIDE(OS)	7687	113	82	.0486	4.229E-02	3.8767E-02
BOTTOM(BOT)	8246	113	82	.0486	4.229E-02	3.8767E-02
TOP(TOP)	8039	194	82	.0526	1.528E-01	1.5429E-01

PIC NO	TIME DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
TOP 7161(194)	14.12 13.13	2.240E-03	.1383	2.795E-03	.1725	3.141E-03	.1970	3.646E-03
OS 2161(113)	14.12 13.13	5.199E-04	.0321	6.342E-04	.0392	7.125E-04	.0440	8.501E-04
BOT 4265(113)	14.12 13.13	5.199E-04	.0321	6.342E-04	.0392	7.125E-04	.0440	8.501E-04
NOS 8765(113)	14.12 13.13	5.199E-04	.0321	6.342E-04	.0392	7.125E-04	.0440	8.501E-04
TOP 7162(194)	15.22 14.23	2.151E-03	.1329	2.695E-03	.1658	3.005E-03	.1893	3.505E-03
OS 2162(113)	15.22 14.23	4.494E-04	.0305	6.092E-04	.0376	6.844E-04	.0423	8.173E-04
BOT 4266(113)	15.22 14.23	4.494E-04	.0305	6.092E-04	.0376	6.844E-04	.0423	8.173E-04
NOS 8766(113)	15.22 14.23	4.494E-04	.0305	6.092E-04	.0376	6.844E-04	.0423	8.173E-04
TOP 7163(194)	16.29 15.31	2.174E-03	.1240	2.589E-03	.1598	2.906E-03	.1825	3.377E-03
OS 2163(113)	16.29 15.31	4.815E-04	.0297	5.674E-04	.0363	6.599E-04	.0407	7.873E-04
BOT 4267(113)	16.29 15.31	4.815E-04	.0297	5.674E-04	.0363	6.599E-04	.0407	7.873E-04
NOS 8767(113)	16.29 15.31	4.815E-04	.0297	5.674E-04	.0363	6.599E-04	.0407	7.873E-04
TOP 7164(194)	17.40 16.41	2.103E-03	.1237	2.500E-03	.1544	2.855E-03	.1762	3.261E-03
OS 2164(113)	17.40 16.41	4.651E-04	.0287	5.674E-04	.0350	6.374E-04	.0393	7.604E-04
BOT 4268(113)	17.40 16.41	4.651E-04	.0287	5.674E-04	.0350	6.374E-04	.0393	7.604E-04
NOS 8768(113)	17.40 16.41	4.651E-04	.0287	5.674E-04	.0350	6.374E-04	.0393	7.604E-04
TOP 7165(194)	18.47 17.49	1.941E-03	.1198	2.422E-03	.1496	2.766E-03	.1708	3.161E-03
OS 2165(113)	18.47 17.49	4.505E-04	.0278	5.496E-04	.0339	6.175E-04	.0381	7.370E-04
BOT 4269(113)	18.47 17.49	4.505E-04	.0278	5.496E-04	.0339	6.175E-04	.0381	7.370E-04
NOS 8769(113)	18.47 17.49	4.505E-04	.0278	5.496E-04	.0339	6.175E-04	.0381	7.370E-04
BOT 4270(113)	19.55 18.59	4.373E-04	.0270	5.335E-04	.0329	5.993E-04	.0370	7.157E-04
TOP 7166(194)	19.57 18.59	1.892E-03	.1163	2.349E-03	.1451	2.682E-03	.1657	3.069E-03
OS 2166(113)	19.57 18.59	4.370E-04	.0270	5.331E-04	.0329	5.994E-04	.0370	7.155E-04
NOS 8770(113)	19.57 18.59	4.370E-04	.0270	5.331E-04	.0329	5.969E-04	.0370	7.155E-04
TOP 7167(194)	20.65 19.67	1.730E-03	.1130	2.284E-03	.1410	2.608E-03	.1610	2.981E-03
OS 2167(113)	20.65 19.67	4.249E-04	.0262	5.183E-04	.0320	5.823E-04	.0360	6.950E-04
BOT 4271(113)	20.65 19.67	4.249E-04	.0262	5.183E-04	.0320	5.823E-04	.0360	6.950E-04
NOS 8771(113)	20.65 19.67	4.249E-04	.0262	5.183E-04	.0320	5.823E-04	.0360	6.950E-04

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NASA-HI OH50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE

VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
40	C	7.94	210.8	1275	40.01	12.99	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (RE .04 FT)	STREF (RE .04 FT)
93.7	.023	1.01	3760	2.131E-05	7.543E-08	1.614E 06	1.620E-02	2.370E-02

CAMERA	ROLL TO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACAX)	TEAR(TO)	BETA(TO)
NOF SIDE(NOS)	7.99	113	82	.0486	4.225E-02	3.8767E-02
UP SIDE(NOS)	7.87	113	82	.0496	4.225E-02	3.8767E-02
BOTTOM(BOT)	8246	113	82	.0486	4.225E-02	3.8767E-02
TOP(TOP)	8039	194	82	.0526	1.528E-01	1.5429E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
TOP 7168(194)	21.72	20.74	1.782E-03	.1101	2.224E-03	.1374	2.539E-03	.1568	2.904E-03
OS 2169(113)	21.72	20.74	4.137E-04	.0255	5.047E-04	.0312	5.670E-04	.0350	6.770E-04
BOT 4272(113)	21.72	20.74	4.137E-04	.0255	5.047E-04	.0312	5.670E-04	.0350	6.770E-04
NOS 2772(113)	21.72	20.74	4.137E-04	.0255	5.047E-04	.0312	5.670E-04	.0350	6.770E-04
TOP 7169(194)	22.03	21.04	1.737E-03	.1072	2.167E-03	.1338	2.475E-03	.1528	2.828E-03
OS 2169(113)	22.03	21.04	4.031E-04	.0249	4.918E-04	.0304	5.525E-04	.0341	6.595E-04
BOT 4273(113)	22.03	21.04	4.031E-04	.0249	4.918E-04	.0304	5.525E-04	.0341	6.595E-04
NOS 2773(113)	22.03	21.04	4.031E-04	.0249	4.918E-04	.0304	5.525E-04	.0341	6.595E-04
TOP 7170(194)	23.00	22.02	1.695E-03	.1047	2.110E-03	.1306	2.416E-03	.1492	2.761E-03
OS 2170(113)	23.00	22.02	3.934E-04	.0243	4.801E-04	.0296	5.394E-04	.0333	6.438E-04
BOT 4274(113)	23.00	22.02	3.936E-04	.0243	4.801E-04	.0296	5.394E-04	.0333	6.438E-04
NOS 2774(113)	23.00	22.02	3.936E-04	.0243	4.801E-04	.0296	5.394E-04	.0333	6.438E-04
BOT 4275(113)	24.00	23.00	3.846E-04	.0237	4.690E-04	.0290	5.271E-04	.0325	6.292E-04
TOP 7171(194)	25.00	24. 2	1.656E-03	.1023	2.067E-03	.1276	2.360E-03	.1457	2.698E-03
OS 2171(113)	25.00	24. 2	3.844E-04	.0237	4.690E-04	.0290	5.268E-04	.0325	6.292E-04
NOS 2775(113)	25.00	24.02	3.844E-04	.0237	4.690E-04	.0290	5.268E-04	.0325	6.292E-04
TOP 7172(194)	26.04	25.10	1.629E-03	.1006	2.022E-03	.1248	2.309E-03	.1425	2.639E-03
OS 2172(113)	26.04	25.10	3.761E-04	.0232	4.588E-04	.0283	5.154E-04	.0318	6.152E-04
BOT 4276(113)	26.04	25.10	3.761E-04	.0232	4.588E-04	.0283	5.154E-04	.0318	6.152E-04
NOS 2776(113)	26.04	25.10	3.761E-04	.0232	4.588E-04	.0283	5.154E-04	.0318	6.152E-04
OS 2173(113)	27.16	26.17	3.683E-04	.0227	4.493E-04	.0277	5.047E-04	.0312	6.027E-04
BOT 4277(113)	27.16	26.17	3.683E-04	.0227	4.493E-04	.0277	5.047E-04	.0312	6.027E-04
NOS 2777(113)	27.16	26.17	3.683E-04	.0227	4.493E-04	.0277	5.047E-04	.0312	6.027E-04
TOP 7173(194)	27.19	26.20	1.598E-03	.0979	1.974E-03	.1222	2.260E-03	.1395	2.581E-03
TOP 7174(194)	28.24	27.27	1.554E-03	.0960	1.940E-03	.1198	2.215E-03	.1368	2.532E-03
OS 2174(113)	28.24	27.27	3.609E-04	.0223	4.401E-04	.0272	4.944E-04	.0305	5.905E-04
BOT 4278(113)	28.24	27.27	3.609E-04	.0223	4.401E-04	.0272	4.944E-04	.0305	5.905E-04
NOS 2778(113)	28.24	27.27	3.609E-04	.0223	4.401E-04	.0272	4.944E-04	.0305	5.905E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

4/10/74

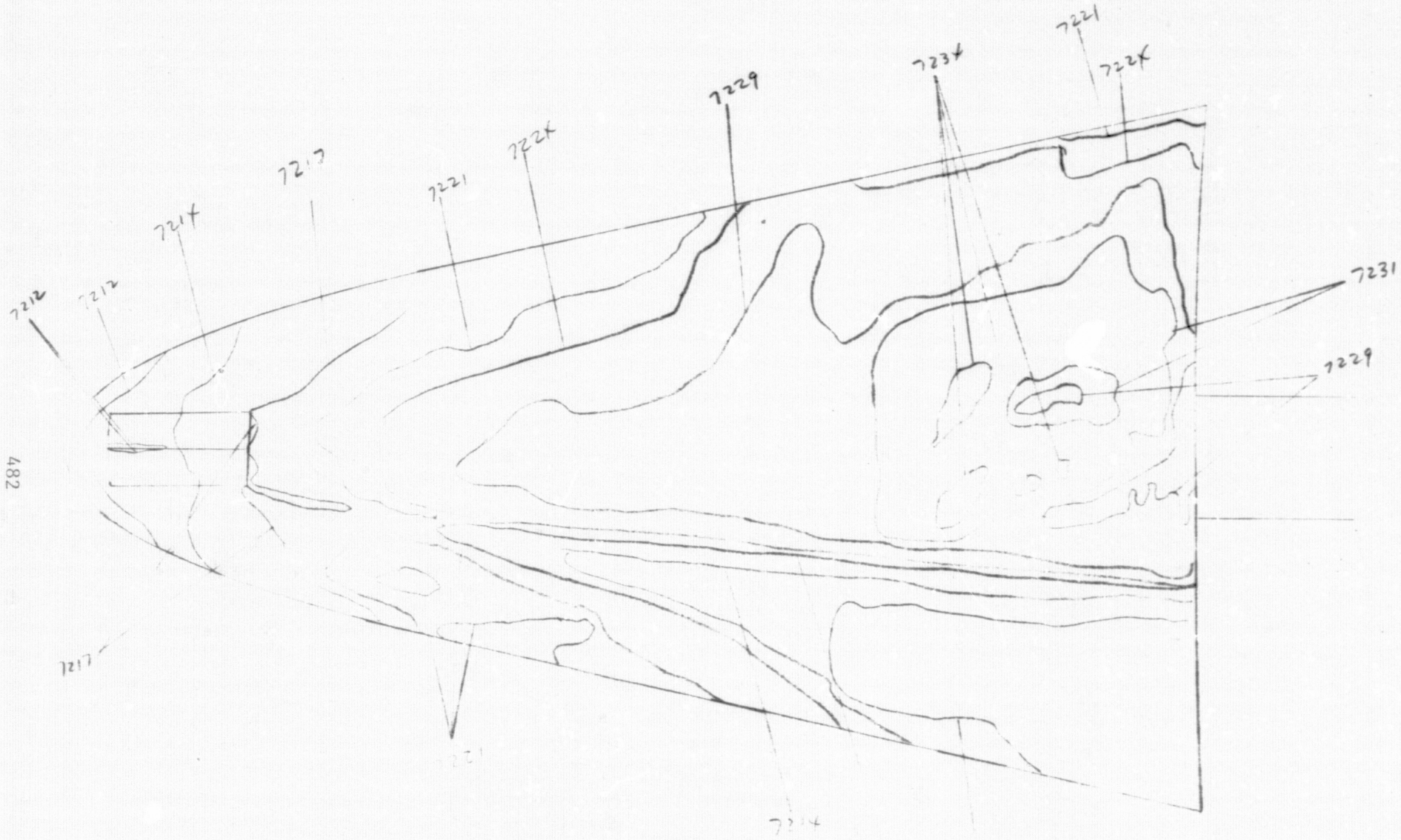
NASA-RI OH60 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VAS26 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
40	0	7.94	210.7	1275	40.01	12.99	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	ML-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.023	1.099	3766	2.330E-05	7.544E-08	1.213E 06	1.619E-02	2.671E-02

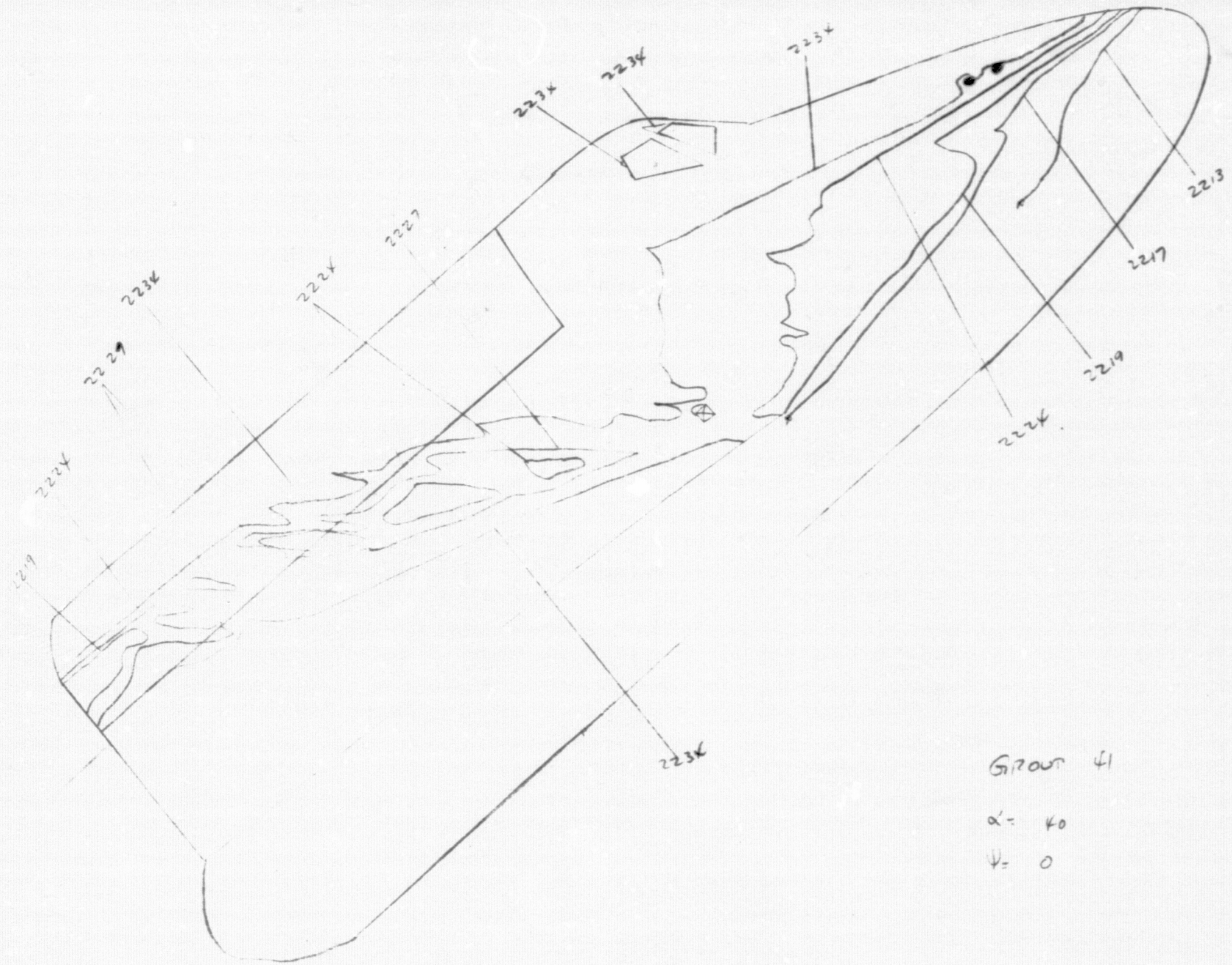
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAK)	THAE(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	82	.0486	4.229E-02	3.8767E-02
OP SIDE(OS)	7687	113	82	.0486	4.229E-02	3.8767E-02
HOTTOM(BOT)	8246	113	82	.0486	4.229E-02	3.8767E-02
TOP(TOP)	8039	194	82	.0526	1.62HE-01	1.5429E-01

PIC NO	LINE RELATIVE		H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
TOP 7175(194)	29.33	28.35	1.-24E-03	.0941	1.902E-03	.1175	2.172E-03	.1341	2.484E-03
OS 2175(113)	29.33	28.35	3.439E-04	.0219	4.317E-04	.0267	4.849E-04	.0299	5.792E-04
HOT 4279(113)	29.33	28.35	3.439E-04	.0219	4.317E-04	.0267	4.849E-04	.0299	5.792E-04
NOS 8779(113)	29.33	28.35	3.439E-04	.0219	4.317E-04	.0267	4.849E-04	.0299	5.792E-04
TOP 7176(194)	30.44	29.45	1.495E-03	.0924	1.867E-03	.1153	2.131E-03	.1316	2.437E-03
OS 2176(113)	30.44	29.45	3.472E-04	.0214	4.235E-04	.0262	4.758E-04	.0294	5.682E-04
HOT 4280(113)	30.44	29.45	3.472E-04	.0214	4.235E-04	.0262	4.758E-04	.0294	5.682E-04
NOS 8743(113)	30.44	29.45	3.472E-04	.0214	4.235E-04	.0262	4.758E-04	.0294	5.682E-04
TOP 7177(194)	31.51	30.53	1.454E-03	.0907	1.833E-03	.1132	2.093E-03	.1293	2.391E-03
OS 2177(113)	31.51	30.53	3.410E-04	.0210	4.160E-04	.0257	4.673E-04	.0288	5.576E-04
HOT 4281(113)	31.51	30.53	3.410E-04	.0210	4.160E-04	.0257	4.673E-04	.0288	5.576E-04
NOS 8741(113)	31.51	30.53	3.410E-04	.0210	4.160E-04	.0257	4.673E-04	.0288	5.576E-04
HOT 4282(113)	32.59	31.60	3.451E-04	.0207	4.098E-04	.0252	4.593E-04	.0284	5.483E-04
TOP 7178(194)	32.61	31.63	1.443E-03	.0891	1.801E-03	.1112	2.055E-03	.1269	2.349E-03
OS 2178(113)	32.61	31.63	3.459E-04	.0207	4.097E-04	.0252	4.591E-04	.0283	5.478E-04
NOS 8742(113)	32.61	31.63	3.459E-04	.0207	4.097E-04	.0252	4.591E-04	.0283	5.478E-04
	33.74		MODEL HAS LEFT CENTERLINE						
TOP 7179(194)	33.69	32.71	1.415E-03	.0876	1.771E-03	.1094	2.022E-03	.1249	2.311E-03
OS 2179(113)	33.69	32.71	3.434E-04	.0203	4.019E-04	.0248	4.515E-04	.0279	5.390E-04
HOT 4283(113)	33.69	32.71	3.434E-04	.0203	4.019E-04	.0248	4.515E-04	.0279	5.390E-04
NOS 8783(113)	33.69	32.71	3.434E-04	.0203	4.019E-04	.0248	4.515E-04	.0279	5.390E-04
TOP 7180(194)	34.76	33.78	1.396E-03	.0862	1.743E-03	.1076	1.990E-03	.1228	2.273E-03
OS 2180(113)	34.76	33.78	3.442E-04	.0200	3.955E-04	.0244	4.443E-04	.0274	5.300E-04
HOT 4284(113)	34.76	33.78	3.442E-04	.0200	3.955E-04	.0244	4.443E-04	.0274	5.300E-04
NOS 8784(113)	34.76	33.78	3.442E-04	.0200	3.955E-04	.0244	4.443E-04	.0274	5.300E-04



GROUP 41
X = 40
41.0

482



GROUP 41

α = 40

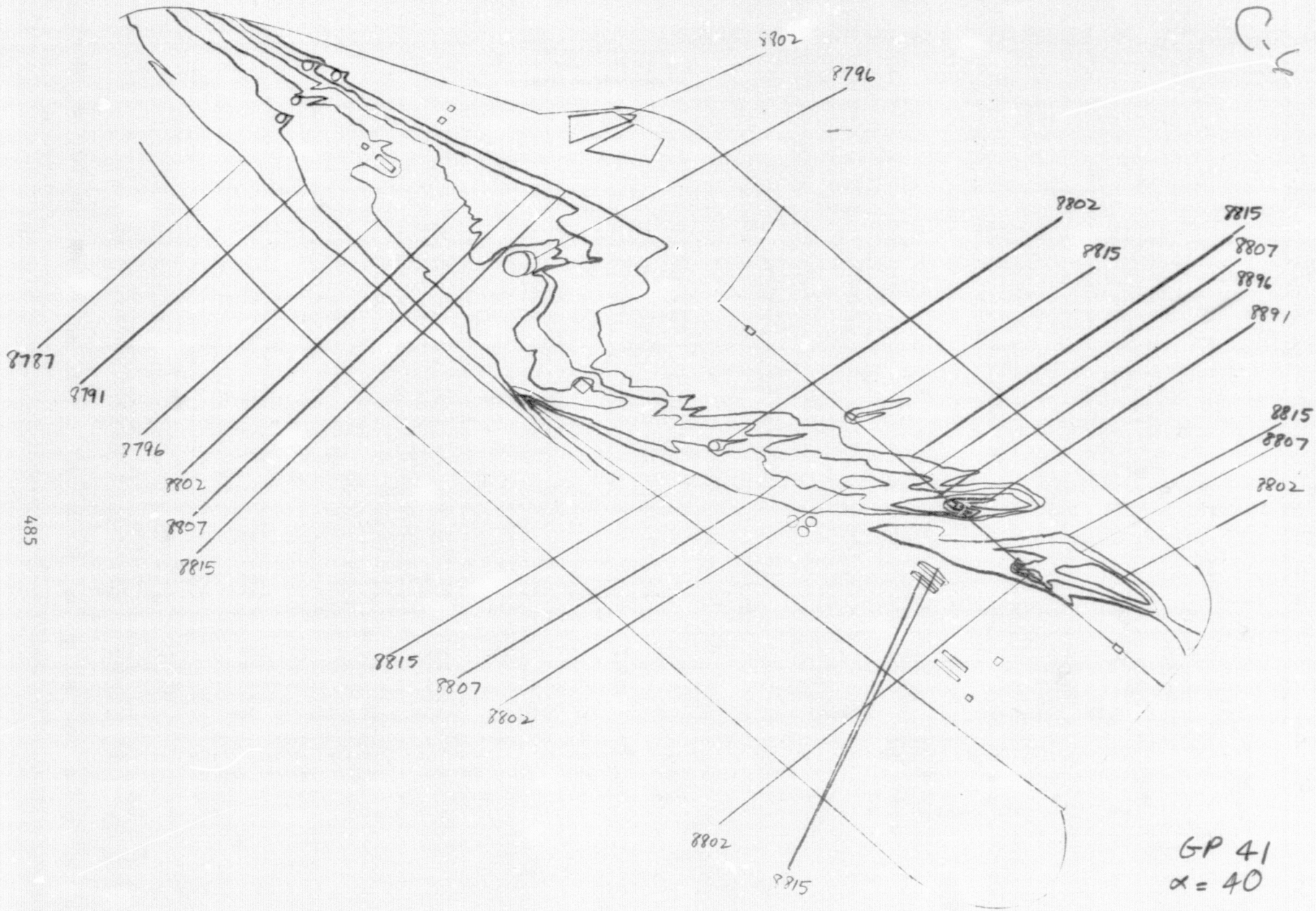
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GROUP 41

$\alpha = 40$

$\psi = 0$

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



GP 41
$\alpha = 40$
$\psi = 0$

485

NASA-RI OHSO — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
41	0	7.94	211.1	1274	39.99	13.01	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.023	1.002	3765	2.035E-05	7.540E-08	1.016E 06	1.621E-02	2.668E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	85	.0486	0	0
OP SIDE(OS)	7738	113	85	.0486	0	0
BOTTOM(BOT)	8246	113	85	.0486	0	0
TOP(TOP)	8197	194	85	.0526	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
BO 4285(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 7208(194)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 2208(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 8785(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 7209(194)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 2209(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 4286(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 8786(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.78								
TOP 7210(194)	2.18	1.18	7.283E-03	.4494	9.095E-03	.5612	1.039E-02	.6409	1.184E-02
OS 2210(113)	2.18	1.18	1.571E-03	.0969	1.914E-03	.1181	2.152E-03	.1328	2.565E-03
BOT 4287(113)	2.18	1.18	1.571E-03	.0969	1.914E-03	.1181	2.152E-03	.1328	2.565E-03
NOS 8787(113)	2.18	1.18	1.571E-03	.0969	1.914E-03	.1181	2.152E-03	.1328	2.565E-03
BOT 4288(113)	3.25	2.26	1.136E-03	.0701	1.384E-03	.0854	1.556E-03	.0960	1.854E-03
TOP 7211(194)	3.28	2.28	5.238E-03	.3231	6.541E-03	.4035	7.470E-03	.4608	8.514E-03
OS 2211(113)	3.28	2.28	1.130E-03	.0697	1.376E-03	.0849	1.548E-03	.0955	1.844E-03
NOS 8788(113)	3.28	2.28	1.130E-03	.0697	1.376E-03	.0849	1.548E-03	.0955	1.844E-03
TOP 7212(194)	4.36	3.36	4.318E-03	.2664	5.392E-03	.3327	6.157E-03	.3799	7.021E-03
OS 2212(113)	4.36	3.36	9.311E-04	.0575	1.134E-03	.0700	1.276E-03	.0787	1.521E-03
BOT 4289(113)	4.36	3.36	9.311E-04	.0575	1.134E-03	.0700	1.276E-03	.0787	1.521E-03
NOS 8789(113)	4.36	3.36	9.311E-04	.0575	1.134E-03	.0700	1.276E-03	.0787	1.521E-03
TOP 7213(194)	5.43	4.43	3.757E-03	.2318	4.692E-03	.2895	5.358E-03	.3305	6.107E-03
OS 2213(113)	5.43	4.43	8.103E-04	.0500	9.872E-04	.0609	1.110E-03	.0685	1.323E-03
BOT 4290(113)	5.43	4.43	8.103E-04	.0500	9.872E-04	.0609	1.110E-03	.0685	1.323E-03
NOS 8790(113)	5.43	4.43	8.103E-04	.0500	9.872E-04	.0609	1.110E-03	.0685	1.323E-03
BOT 4291(113)	6.51	5.51	7.268E-04	.0448	8.856E-04	.0546	9.958E-04	.0614	1.187E-03

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NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
41	0	7.94	211.1	1275	39.99	13.01	53.09	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.023	1.002	3765	2.034E-05	7.540E-08	1.016E 06	1.621E-02	2.668E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	85	.0486	3.839E-02	3.5105E-02
OP SIDE(OS)	7738	113	85	.0486	3.839E-02	3.5105E-02
BOTTOM(BOT)	8246	113	85	.0486	3.839E-02	3.5105E-02
TOP(TOP)	8197	194	85	.0526	1.494E-01	1.5040E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
TOP 7214(194)	6.53	5.53	3.363E-03	.2075	4.199E-03	.2591	4.796E-03	.2959	5.568E-03
OS 2214(113)	6.53	5.53	7.252E-04	.0447	8.836E-04	.0545	9.935E-04	.0613	1.184E-03
NOS 8791(113)	6.53	5.53	7.252E-04	.0447	8.836E-04	.0545	9.935E-04	.0613	1.184E-03
TOP 7215(194)	7.61	6.61	3.077E-03	.1899	3.842E-03	.2371	4.388E-03	.2708	5.003E-03
OS 2215(113)	7.61	6.61	6.635E-04	.0409	8.085E-04	.0499	9.091E-04	.0561	1.084E-03
BOT 4292(113)	7.61	6.61	6.635E-04	.0409	8.085E-04	.0499	9.091E-04	.0561	1.084E-03
NOS 8792(113)	7.61	6.61	6.635E-04	.0409	8.085E-04	.0499	9.091E-04	.0561	1.084E-03
TOP 7216(194)	8.68	7.69	2.853E-03	.1761	3.563E-03	.2199	4.069E-03	.2511	4.640E-03
OS 2216(113)	8.68	7.69	6.153E-04	.0380	7.497E-04	.0463	8.430E-04	.0520	1.005E-03
BOT 4293(113)	8.68	7.69	6.153E-04	.0380	7.497E-04	.0463	8.430E-04	.0520	1.005E-03
NOS 8793(113)	8.68	7.69	6.153E-04	.0380	7.497E-04	.0463	8.430E-04	.0520	1.005E-03
BOT 4294(113)	9.76	8.76	5.763E-04	.0356	7.022E-04	.0433	7.896E-04	.0487	9.413E-04
TOP 7217(194)	9.79	8.79	2.669E-03	.1647	3.333E-03	.2056	3.806E-03	.2348	4.340E-03
OS 2217(113)	9.79	8.79	5.755E-04	.0355	7.012E-04	.0433	7.884E-04	.0486	9.400E-04
NOS 8794(113)	9.79	8.79	5.755E-04	.0355	7.012E-04	.0433	7.884E-04	.0486	9.400E-04
TOP 7218(194)	10.86	9.86	2.519E-03	.1554	3.146E-03	.1941	3.592E-03	.2216	4.096E-03
OS 2218(113)	10.86	9.86	5.432E-04	.0335	6.618E-04	.0408	7.442E-04	.0459	8.872E-04
BOT 4295(113)	10.86	9.86	5.432E-04	.0335	6.618E-04	.0408	7.442E-04	.0459	8.872E-04
NOS 8795(113)	10.86	9.86	5.432E-04	.0335	6.618E-04	.0408	7.442E-04	.0459	8.872E-04
TOP 7219(194)	11.94	10.94	2.392E-03	.1477	2.987E-03	.1844	3.411E-03	.2106	3.893E-03
OS 2219(113)	11.94	10.94	5.159E-04	.0318	6.284E-04	.0388	7.066E-04	.0436	8.432E-04
BOT 4296(113)	11.94	10.94	5.158E-04	.0318	6.284E-04	.0388	7.066E-04	.0436	8.432E-04
NOS 8796(113)	11.94	10.94	5.158E-04	.0318	6.284E-04	.0388	7.066E-04	.0436	8.432E-04
TOP 7220(194)	13.04	12.04	2.280E-03	.1407	2.847E-03	.1757	3.251E-03	.2007	3.709E-03
OS 2220(113)	13.04	12.04	4.916E-04	.0303	5.990E-04	.0370	6.735E-04	.0416	8.034E-04
BOT 4297(113)	13.04	12.04	4.916E-04	.0303	5.990E-04	.0370	6.735E-04	.0416	8.034E-04
NOS 8797(113)	13.04	12.04	4.916E-04	.0303	5.990E-04	.0370	6.735E-04	.0416	8.034E-04

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
41	0	7.94	211.0	1275	39.99	13.01	53.03	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.023	1.002	3765	2.033E-05	7.540E-08	1.015E 06	1.620E-02	2.668E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	85	.0486	3.839E-02	3.5105E-02
OP SIDE(OS)	7738	113	85	.0486	3.839E-02	3.5105E-02
BOTTOM(BOT)	8246	113	85	.0486	3.839E-02	3.5105E-02
TOP(TOP)	8197	194	85	.0526	1.494E-01	1.5040E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
TOP 7221(194)	14.12	13.12	2.184E-03	.1348	2.728E-03	.1684	3.115E-03	.1923	3.554E-03
OS 2221(113)	14.12	13.12	4.710E-04	.0291	5.739E-04	.0354	6.453E-04	.0398	7.697E-04
BOT 4298(113)	14.12	13.12	4.710E-04	.0291	5.739E-04	.0354	6.453E-04	.0398	7.697E-04
NOS 8798(113)	14.12	13.12	4.710E-04	.0291	5.739E-04	.0354	6.453E-04	.0398	7.697E-04
TOP 7222(194)	15.19	14.19	2.100E-03	.1296	2.622E-03	.1618	2.995E-03	.1848	3.416E-03
OS 2222(113)	15.19	14.19	4.528E-04	.0279	5.517E-04	.0341	6.204E-04	.0383	7.399E-04
BOT 4299(113)	15.19	14.19	4.528E-04	.0279	5.517E-04	.0341	6.204E-04	.0383	7.399E-04
NOS 8799(113)	15.19	14.19	4.528E-04	.0279	5.517E-04	.0341	6.204E-04	.0383	7.399E-04
TOP 7223(194)	16.29	15.30	2.023E-03	.1249	2.526E-03	.1559	2.885E-03	.1781	3.292E-03
OS 2223(113)	16.29	15.30	4.362E-04	.0269	5.315E-04	.0328	5.976E-04	.0369	7.131E-04
BOT 4300(113)	16.29	15.30	4.362E-04	.0269	5.315E-04	.0328	5.976E-04	.0369	7.131E-04
NOS 8800(113)	16.29	15.30	4.362E-04	.0269	5.315E-04	.0328	5.976E-04	.0369	7.131E-04
TOP 7224(194)	17.37	16.37	1.955E-03	.1207	2.442E-03	.1507	2.788E-03	.1721	3.181E-03
OS 2224(113)	17.37	16.37	4.216E-04	.0260	5.137E-04	.0317	5.777E-04	.0357	6.890E-04
BOT 4301(113)	17.37	16.37	4.216E-04	.0260	5.137E-04	.0317	5.777E-04	.0357	6.890E-04
NOS 8801(113)	17.37	16.37	4.216E-04	.0260	5.137E-04	.0317	5.777E-04	.0357	6.890E-04
BOT 4302(113)	18.45	17.45	4.084E-04	.0252	4.976E-04	.0307	5.596E-04	.0345	6.677E-04
TOP 7225(194)	18.47	17.47	1.893E-03	.1168	2.363E-03	.1459	2.699E-03	.1666	3.081E-03
OS 2225(113)	18.47	17.47	4.081E-04	.0252	4.973E-04	.0307	5.592E-04	.0345	6.673E-04
NOS 8802(113)	18.47	17.47	4.081E-04	.0252	4.973E-04	.0307	5.592E-04	.0345	6.673E-04
TOP 7226(194)	19.55	18.55	1.837E-03	.1134	2.294E-03	.1416	2.620E-03	.1617	2.988E-03
OS 2226(113)	19.55	18.55	3.961E-04	.0244	4.826E-04	.0298	5.427E-04	.0335	6.473E-04
BOT 4303(113)	19.55	18.55	3.961E-04	.0244	4.826E-04	.0298	5.427E-04	.0335	6.473E-04
NOS 8803(113)	19.55	18.55	3.961E-04	.0244	4.826E-04	.0298	5.427E-04	.0335	6.473E-04
TOP 7227(194)	20.62	19.63	1.786E-03	.1102	2.230E-03	.1377	2.547E-03	.1572	2.907E-03
OS 2227(113)	20.62	19.63	3.851E-04	.0238	4.692E-04	.0290	5.276E-04	.0326	6.296E-04
BOT 4304(113)	20.62	19.63	3.851E-04	.0238	4.692E-04	.0290	5.276E-04	.0326	6.296E-04
NOS 8804(113)	20.62	19.63	3.851E-04	.0238	4.692E-04	.0290	5.276E-04	.0326	6.296E-04

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VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL 8

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
41	0	7.94	210.9	1275	39.99	13.01	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	WREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.023	1.001	3765	2.032E-05	7.541E-08	1.015E 06	1.620E-02	2.669E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	85	.0486	3.839E-02	3.5105E-02
OP SIDE(OS)	7738	113	85	.0486	3.839E-02	3.5105E-02
BOTTOM(BOT)	8246	113	85	.0486	3.839E-02	3.5105E-02
TOP(TOP)	8197	194	85	.0526	1.494E-01	1.5040E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
TOP 7228(194)	21.72	20.73	1.738E-03	.1073	2.170E-03	.1340	2.478E-03	.1530	2.830E-03
OS 2228(113)	21.72	20.73	3.747E-04	.0231	4.566E-04	.0282	5.134E-04	.0317	6.130E-04
BOT 4305(113)	21.72	20.73	3.747E-04	.0231	4.566E-04	.0282	5.134E-04	.0317	6.130E-04
NOS 8805(113)	21.72	20.73	3.747E-04	.0231	4.566E-04	.0282	5.134E-04	.0317	6.130E-04
TOP 7229(194)	22.80	21.80	1.694E-03	.1046	2.116E-03	.1306	2.416E-03	.1491	2.757E-03
OS 2229(113)	22.80	21.80	3.654E-04	.0226	4.452E-04	.0275	5.006E-04	.0309	5.971E-04
BOT 4306(113)	22.80	21.80	3.654E-04	.0226	4.452E-04	.0275	5.006E-04	.0309	5.971E-04
NOS 8806(113)	22.80	21.80	3.654E-04	.0226	4.452E-04	.0275	5.006E-04	.0309	5.971E-04
TOP 7230(194)	23.88	22.88	1.654E-03	.1021	2.065E-03	.1275	2.359E-03	.1456	2.692E-03
OS 2230(113)	23.88	22.88	3.567E-04	.0220	4.346E-04	.0268	4.887E-04	.0302	5.831E-04
BOT 4307(113)	23.88	22.88	3.567E-04	.0220	4.346E-04	.0268	4.887E-04	.0302	5.831E-04
NOS 8807(113)	23.88	22.88	3.567E-04	.0220	4.346E-04	.0268	4.887E-04	.0302	5.831E-04
TOP 7231(194)	24.98	23.98	1.616E-03	.0997	2.017E-03	.1245	2.304E-03	.1422	2.630E-03
OS 2231(113)	24.98	23.98	3.484E-04	.0215	4.245E-04	.0262	4.773E-04	.0295	5.696E-04
BOT 4308(113)	24.98	23.98	3.484E-04	.0215	4.245E-04	.0262	4.773E-04	.0295	5.696E-04
NOS 8808(113)	24.98	23.98	3.484E-04	.0215	4.245E-04	.0262	4.773E-04	.0295	5.696E-04
TOP 7232(194)	26.05	25.06	1.580E-03	.0975	1.974E-03	.1218	2.254E-03	.1391	2.571E-03
OS 2232(113)	26.05	25.06	3.408E-04	.0210	4.153E-04	.0256	4.669E-04	.0288	5.570E-04
BOT 4309(113)	26.05	25.06	3.408E-04	.0210	4.153E-04	.0256	4.669E-04	.0288	5.570E-04
NOS 8809(113)	26.05	25.06	3.408E-04	.0210	4.153E-04	.0256	4.669E-04	.0288	5.570E-04
HOT 4310(113)	27.13	26.13	3.337E-04	.0206	4.066E-04	.0251	4.572E-04	.0282	5.454E-04
TOP 7233(194)	27.16	26.16	1.547E-03	.0955	1.932E-03	.1192	2.206E-03	.1362	2.518E-03
OS 2233(113)	27.16	26.16	3.336E-04	.0206	4.064E-04	.0251	4.570E-04	.0282	5.454E-04
NOS 8810(113)	27.16	26.16	3.336E-04	.0206	4.064E-04	.0251	4.570E-04	.0282	5.454E-04
TOP 7234(194)	28.23	27.23	1.516E-03	.0936	1.893E-03	.1168	2.162E-03	.1334	2.466E-03
OS 2234(113)	28.23	27.23	3.269E-04	.0202	3.983E-04	.0246	4.479E-04	.0276	5.342E-04
HOT 4311(113)	28.23	27.23	3.269E-04	.0202	3.983E-04	.0246	4.479E-04	.0276	5.342E-04
NOS 8811(113)	28.23	27.23	3.269E-04	.0202	3.983E-04	.0246	4.479E-04	.0276	5.342E-04

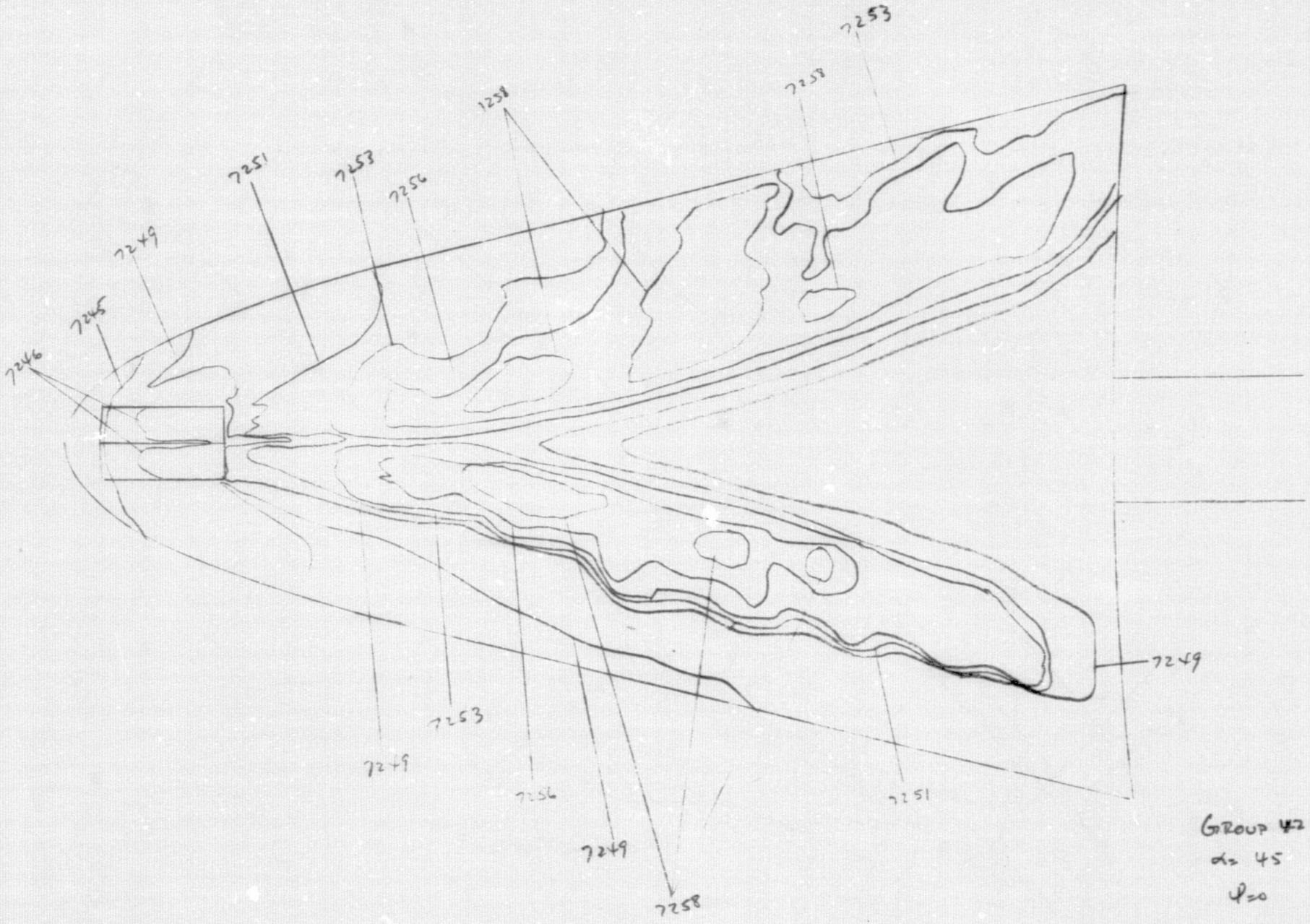
NASA-RI OH58 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
41	0	7.94	211.0	1275	39.99	13.81	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SYREF (R= .04 FT)
93.7	.023	1.002	3765	2.033E-05	7.541E-08	1.015E 06	1.620E-02	2.669E-02

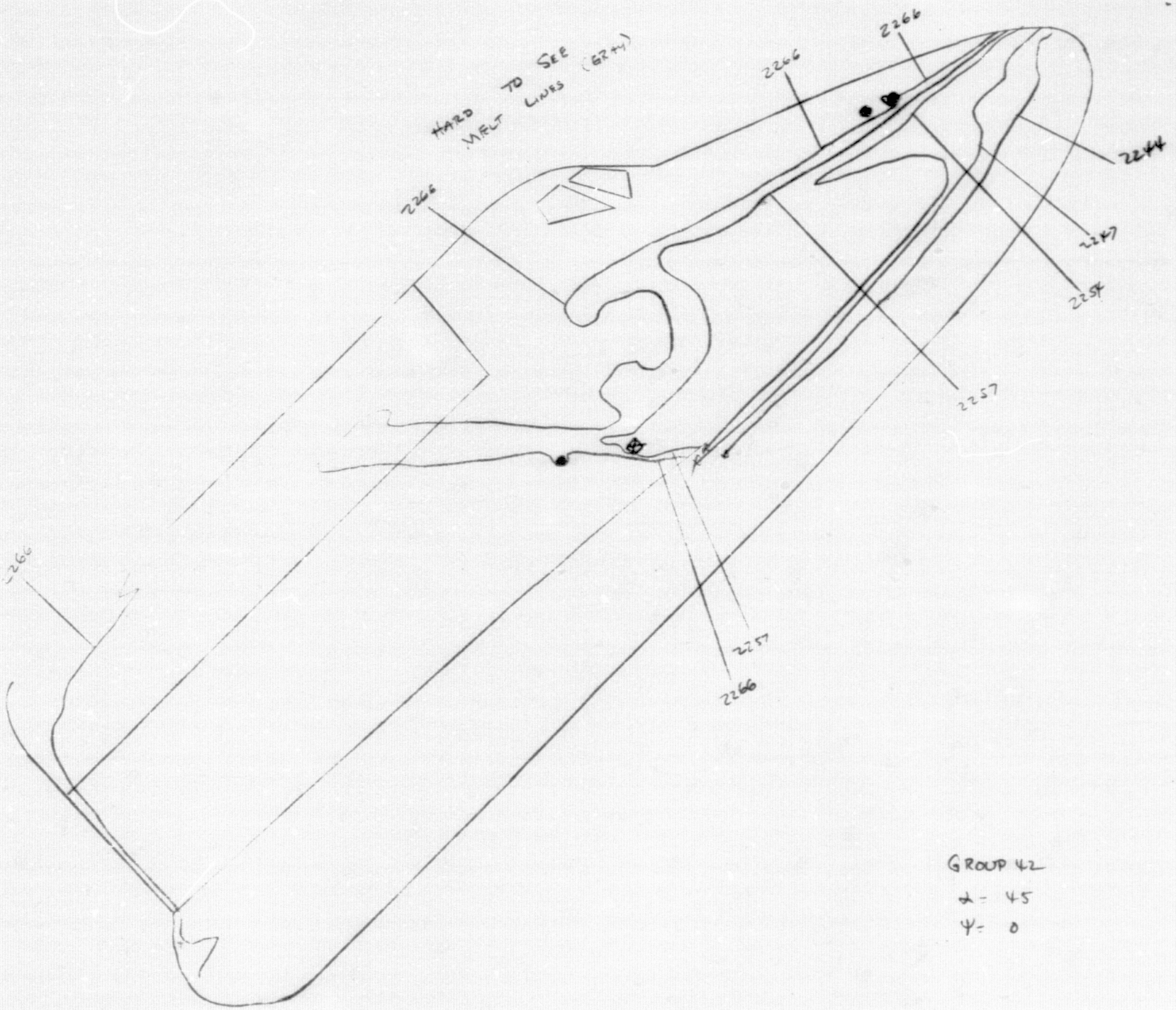
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXKT	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	85	.0486	3.839E-02	3.5105E-02
OP SIDE(OS)	7738	113	85	.0486	3.839E-02	3.5105E-02
BOTTOM(BOT)	8246	113	85	.0486	3.839E-02	3.5105E-02
TOP(TOP)	8197	194	85	.0526	1.494E-01	1.5040E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
TOP 7235(194)	29.31	28.31	1.487E-03	.0918	1.857E-03	.1146	2.120E-03	.1309	2.420E-03
OS 2235(113)	29.31	28.31	3.206E-04	.0198	3.907E-04	.0241	4.393E-04	.0271	5.242E-04
BOT 4312(113)	29.31	28.31	3.206E-04	.0198	3.907E-04	.0241	4.393E-04	.0271	5.242E-04
NOS 8812(113)	29.31	28.31	3.206E-04	.0198	3.907E-04	.0241	4.393E-04	.0271	5.242E-04
BOT 4313(113)	30.38	29.39	3.147E-04	.0194	3.835E-04	.0237	4.312E-04	.0266	5.145E-04
TOP 7236(194)	30.41	29.41	1.459E-03	.0901	1.822E-03	.1125	2.080E-03	.1284	2.374E-03
OS 2236(113)	30.41	29.41	3.146E-04	.0194	3.833E-04	.0237	4.310E-04	.0266	5.143E-04
NOS 8813(113)	30.41	29.41	3.146E-04	.0194	3.833E-04	.0237	4.310E-04	.0266	5.143E-04
TOP 7237(194)	31.49	30.49	1.433E-03	.0885	1.789E-03	.1105	2.043E-03	.1261	2.332E-03
OS 2237(113)	31.49	30.49	3.090E-04	.0191	3.765E-04	.0232	4.233E-04	.0261	5.051E-04
BOT 4314(113)	31.49	30.49	3.090E-04	.0191	3.765E-04	.0232	4.233E-04	.0261	5.051E-04
NOS 8814(113)	31.49	30.49	3.090E-04	.0191	3.765E-04	.0232	4.233E-04	.0261	5.051E-04
TOP 7238(194)	32.56	31.56	1.408E-03	.0869	1.758E-03	.1086	2.008E-03	.1240	2.292E-03
OS 2238(113)	32.56	31.56	3.037E-04	.0187	3.700E-04	.0228	4.160E-04	.0257	4.965E-04
BOT 4315(113)	32.56	31.56	3.037E-04	.0187	3.700E-04	.0228	4.160E-04	.0257	4.965E-04
NOS 8815(113)	32.56	31.56	3.037E-04	.0187	3.700E-04	.0228	4.160E-04	.0257	4.965E-04
	32.89		MODEL HAS LEFT CENTERLINE						
TOP 7239(194)	33.64	32.64	1.385E-03	.0855	1.729E-03	.1068	1.975E-03	.1219	2.254E-03
OS 2239(113)	33.66	32.67	2.985E-04	.0184	3.637E-04	.0224	4.090E-04	.0252	4.876E-04
BOT 4316(113)	33.66	32.67	2.985E-04	.0184	3.637E-04	.0224	4.090E-04	.0252	4.876E-04
NOS 8816(113)	33.66	32.67	2.985E-04	.0184	3.637E-04	.0224	4.090E-04	.0252	4.876E-04
TOP 7240(194)	34.74	33.74	1.362E-03	.0841	1.701E-03	.1050	1.942E-03	.1199	2.218E-03
OS 2240(113)	34.74	33.74	2.937E-04	.0181	3.579E-04	.0221	4.024E-04	.0248	4.804E-04
BOT 4317(113)	34.74	33.74	2.937E-04	.0181	3.579E-04	.0221	4.024E-04	.0248	4.804E-04
NOS 8817(113)	34.74	33.74	2.937E-04	.0181	3.579E-04	.0221	4.024E-04	.0248	4.804E-04



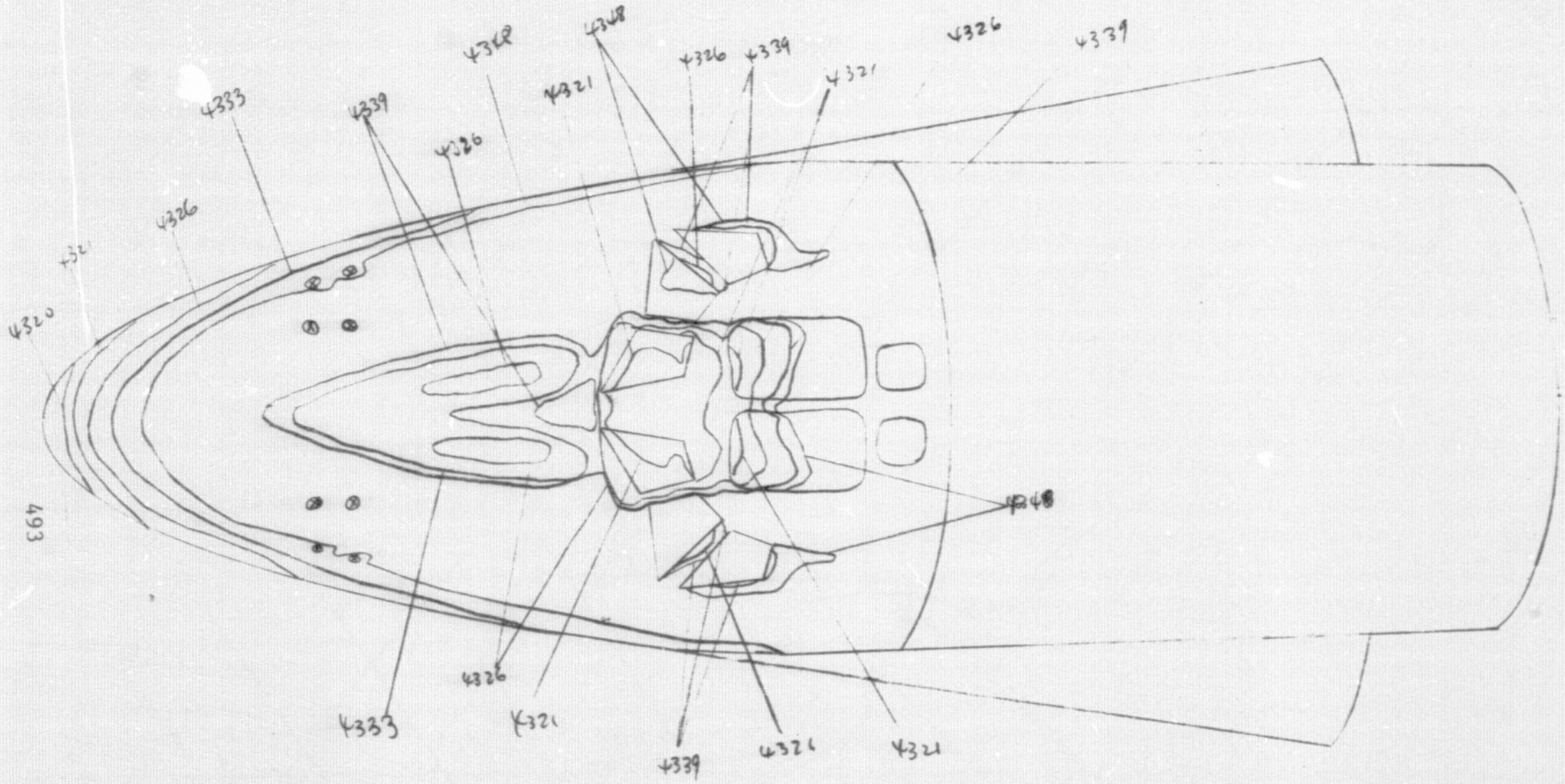
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REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



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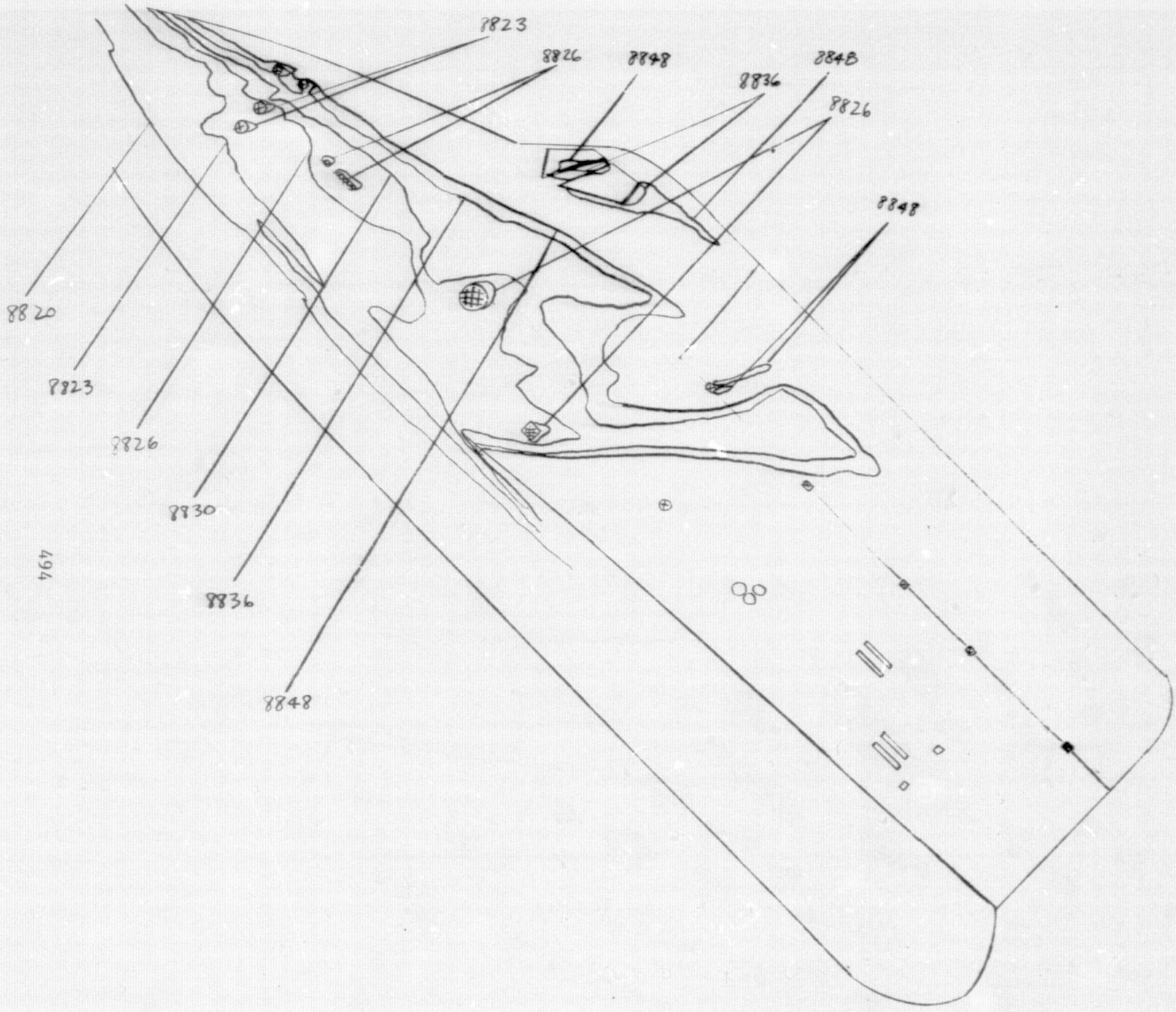
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GROUP 42
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REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



GP 42

$\alpha = 45$

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

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4/10/74

NASA-RT OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
42	0	7.94	210.6	1273	45.00	8.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.023	1.000	3763	2.032E-05	7.530E-08	1.015E 06	1.618E-02	2.669E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7499	113	79	.0486	0	0
UP SIDE(US)	7738	113	79	.0486	0	0
HOTTOM(HOT)	8246	113	79	.0486	0	0
TOP(TOP)	8197	194	79	.0526	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TO 7241(194)	.03		MODEL HAS NOT REACHED CENTERLINE						
US 2241(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 4318(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 8818(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 7242(194)	1.10		MODEL HAS NOT REACHED CENTERLINE						
US 2242(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 4319(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 8819(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.8								
TOP 7243(194)	2.18	1.17	7.740E-03	.4781	9.663E-03	.5970	1.103E-02	.6817	1.260E-02
HOT 4320(113)	2.18	1.17	1.428E-03	.1186	2.340E-03	.1446	2.628E-03	.1624	3.140E-03
US 2243(113)	2.20	1.19	1.400E-03	.1174	2.315E-03	.1430	2.601E-03	.1607	3.107E-03
NOS 8820(113)	2.20	1.19	1.400E-03	.1174	2.315E-03	.1430	2.601E-03	.1607	3.107E-03
TOP 7244(194)	3.26	2.27	5.550E-03	.3427	6.929E-03	.4279	7.913E-03	.4886	9.028E-03
US 2244(113)	3.28	2.27	1.377E-03	.0850	1.678E-03	.1036	1.885E-03	.1164	2.250E-03
HOT 4321(113)	3.28	2.27	1.377E-03	.0850	1.678E-03	.1036	1.885E-03	.1164	2.250E-03
NOS 8821(113)	3.28	2.27	1.377E-03	.0850	1.678E-03	.1036	1.885E-03	.1164	2.250E-03
TOP 7245(194)	4.36	3.34	4.570E-03	.2822	5.706E-03	.3523	6.516E-03	.4024	7.434E-03
US 2245(113)	4.36	3.34	1.134E-03	.0700	1.382E-03	.0853	1.552E-03	.0958	1.852E-03
HOT 4322(113)	4.36	3.34	1.134E-03	.0700	1.382E-03	.0853	1.552E-03	.0958	1.852E-03
NOS 8822(113)	4.36	3.34	1.134E-03	.0700	1.382E-03	.0853	1.552E-03	.0958	1.852E-03
TOP 7246(194)	5.43	4.42	3.475E-03	.2454	4.963E-03	.3064	5.667E-03	.3499	6.463E-03
US 2246(113)	5.43	4.42	9.862E-04	.0609	1.202E-03	.0742	1.350E-03	.0833	1.611E-03
HOT 4323(113)	5.43	4.42	9.862E-04	.0609	1.202E-03	.0742	1.350E-03	.0833	1.611E-03
NOS 8823(113)	5.43	4.42	9.862E-04	.0609	1.202E-03	.0742	1.350E-03	.0833	1.611E-03
TOP 7247(194)	6.53	5.52	3.557E-03	.2195	4.440E-03	.2741	5.071E-03	.3130	5.780E-03
US 2247(113)	6.53	5.52	8.823E-04	.0545	1.075E-03	.0664	1.208E-03	.0745	1.440E-03
HOT 4324(113)	6.53	5.52	8.823E-04	.0545	1.075E-03	.0664	1.208E-03	.0745	1.440E-03
NOS 8824(113)	6.53	5.52	8.823E-04	.0545	1.075E-03	.0664	1.208E-03	.0745	1.440E-03

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NASA-RI OHEO

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
42	0	7.94	211.1	1273	45.00	8.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.023	1.002	3763	2.037E-05	7.530E-08	1.018E 06	1.620E-02	2.666E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	79	.0486	4.634E-02	4.2658E-02
UP SIDE(OS)	7738	113	79	.0486	4.634E-02	4.2658E-02
BOTTOM(BOT)	8246	113	79	.0486	4.634E-02	4.2658E-02
TOP(TOP)	8197	194	79	.0526	1.567E-01	1.5887E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7248(194)	7.61	6.60	3.254E-03	.2008	4.062E-03	.2507	4.639E-03	.2863	5.288E-03
OS 2248(113)	7.61	6.60	8.072E-04	.0498	9.836E-04	.0607	1.105E-03	.0682	1.318E-03
BOT 4325(113)	7.61	6.60	8.072E-04	.0498	9.836E-04	.0607	1.105E-03	.0682	1.318E-03
NOS 8825(113)	7.61	6.60	8.072E-04	.0498	9.836E-04	.0607	1.105E-03	.0682	1.318E-03
OS 2249(113)	8.68	7.67	7.484E-04	.0462	9.121E-04	.0563	1.024E-03	.0632	1.222E-03
BOT 4326(113)	8.68	7.67	7.484E-04	.0462	9.121E-04	.0563	1.024E-03	.0632	1.222E-03
NOS 8826(113)	8.68	7.67	7.484E-04	.0462	9.121E-04	.0563	1.024E-03	.0632	1.222E-03
TOP 7249(194)	8.71	7.70	3.812E-03	.1858	3.760E-03	.2320	4.294E-03	.2650	4.893E-03
TOP 7250(194)	9.79	8.77	2.421E-03	.1742	3.522E-03	.2174	4.022E-03	.2483	4.587E-03
OS 2250(113)	9.79	8.77	6.999E-04	.0432	8.529E-04	.0527	9.580E-04	.0591	1.143E-03
BOT 4327(113)	9.79	8.77	6.999E-04	.0432	8.529E-04	.0527	9.580E-04	.0591	1.143E-03
NOS 8827(113)	9.79	8.77	6.999E-04	.0432	8.529E-04	.0527	9.580E-04	.0591	1.143E-03
TOP 7251(194)	10.86	9.85	2.663E-03	.1643	3.324E-03	.2051	3.796E-03	.2342	4.323E-03
OS 2251(113)	10.86	9.85	6.605E-04	.0407	8.050E-04	.0497	9.042E-04	.0558	1.077E-03
BOT 4328(113)	10.86	9.85	6.605E-04	.0407	8.050E-04	.0497	9.042E-04	.0558	1.077E-03
NOS 8828(113)	10.86	9.85	6.605E-04	.0407	8.050E-04	.0497	9.042E-04	.0558	1.077E-03
TOP 7252(194)	11.94	10.93	2.528E-03	.1560	3.156E-03	.1948	3.604E-03	.2224	4.106E-03
OS 2252(113)	11.94	10.93	6.272E-04	.0387	7.643E-04	.0472	8.585E-04	.0530	1.023E-03
BOT 4329(113)	11.94	10.93	6.272E-04	.0387	7.643E-04	.0472	8.585E-04	.0530	1.023E-03
NOS 8829(113)	11.94	10.93	6.272E-04	.0387	7.643E-04	.0472	8.585E-04	.0530	1.023E-03
TOP 7253(194)	13.04	12.03	2.410E-03	.1486	3.008E-03	.1856	3.435E-03	.2119	3.912E-03
OS 2253(113)	13.04	12.03	5.978E-04	.0369	7.285E-04	.0449	8.183E-04	.0505	9.748E-04
BOT 4330(113)	13.04	12.03	5.978E-04	.0369	7.285E-04	.0449	8.183E-04	.0505	9.748E-04
NOS 8830(113)	13.04	12.03	5.978E-04	.0369	7.285E-04	.0449	8.183E-04	.0505	9.748E-04
TOP 7254(194)	14.12	13.10	2.308E-03	.1423	2.882E-03	.1777	3.291E-03	.2029	3.745E-03
OS 2254(113)	14.12	13.10	5.727E-04	.0353	6.979E-04	.0430	7.840E-04	.0483	9.331E-04
BOT 4331(113)	14.12	13.10	5.727E-04	.0353	6.979E-04	.0430	7.840E-04	.0483	9.331E-04
NOS 8831(113)	14.12	13.10	5.727E-04	.0353	6.979E-04	.0430	7.840E-04	.0483	9.331E-04

4/10/74

NASA-RI OHEO — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
42	0	7.94	211.5	1273	45.00	8.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
93.5	.023	1.094	3703	2.041E-05	7.530E-08	1.820E 06	1.622E-02	2.663E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	79	.0486	4.634E-02	4.2658E-02
UP SIDE(OS)	7738	113	79	.0486	4.634E-02	4.2658E-02
HOTTOM(BOT)	8246	113	79	.0486	4.634E-02	4.2658E-02
TOP(TOP)	8197	194	79	.0526	1.567E-01	1.5887E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
HOT 4332(113)	15.19	14.18	5.505E-04	.0340	6.709E-04	.0414	7.536E-04	.0465	8.974E-04
TOP 7255(194)	15.22	14.21	2.217E-03	.1368	2.768E-03	.1708	3.161E-03	.1950	3.600E-03
OS 2255(113)	15.22	14.21	5.501E-04	.0339	6.703E-04	.0414	7.530E-04	.0465	8.970E-04
NOS 8832(113)	15.22	14.21	5.501E-04	.0339	6.703E-04	.0414	7.530E-04	.0465	8.970E-04
TOP 7256(194)	16.29	15.28	2.138E-03	.1318	2.669E-03	.1646	3.048E-03	.1879	3.468E-03
OS 2256(113)	16.29	15.28	5.303E-04	.0327	6.463E-04	.0399	7.260E-04	.0448	8.641E-04
HOT 4333(113)	16.29	15.28	5.303E-04	.0327	6.463E-04	.0399	7.260E-04	.0448	8.641E-04
NOS 8833(113)	16.29	15.28	5.303E-04	.0327	6.463E-04	.0399	7.260E-04	.0448	8.641E-04
TOP 7257(194)	17.37	16.36	2.066E-03	.1274	2.580E-03	.1590	2.946E-03	.1816	3.350E-03
OS 2257(113)	17.37	16.36	5.126E-04	.0316	6.247E-04	.0385	7.017E-04	.0433	8.347E-04
HOT 4334(113)	17.37	16.36	5.126E-04	.0316	6.247E-04	.0385	7.017E-04	.0433	8.347E-04
NOS 8834(113)	17.37	16.36	5.126E-04	.0316	6.247E-04	.0385	7.017E-04	.0433	8.347E-04
TOP 7258(194)	18.47	17.46	2.000E-03	.1233	2.497E-03	.1539	2.851E-03	.1758	3.243E-03
OS 2258(113)	18.47	17.46	4.962E-04	.0306	6.046E-04	.0373	6.792E-04	.0419	8.080E-04
HOT 4335(113)	18.47	17.46	4.962E-04	.0306	6.046E-04	.0373	6.792E-04	.0419	8.080E-04
NOS 8835(113)	18.47	17.46	4.962E-04	.0306	6.046E-04	.0373	6.792E-04	.0419	8.080E-04
TOP 7259(194)	19.55	18.54	1.941E-03	.1196	2.423E-03	.1494	2.767E-03	.1706	3.146E-03
OS 2259(113)	19.55	18.54	4.815E-04	.0297	5.868E-04	.0362	6.592E-04	.0406	7.838E-04
HOT 4336(113)	19.55	18.54	4.815E-04	.0297	5.868E-04	.0362	6.592E-04	.0406	7.838E-04
NOS 8836(113)	19.55	18.54	4.815E-04	.0297	5.868E-04	.0362	6.592E-04	.0406	7.838E-04
TOP 7260(194)	20.62	19.61	1.887E-03	.1163	2.356E-03	.1452	2.690E-03	.1658	3.058E-03
OS 2260(113)	20.62	19.61	4.681E-04	.0289	5.705E-04	.0352	6.408E-04	.0395	7.620E-04
HOT 4337(113)	20.62	19.61	4.681E-04	.0289	5.705E-04	.0352	6.408E-04	.0395	7.620E-04
NOS 8837(113)	20.62	19.61	4.681E-04	.0289	5.705E-04	.0352	6.408E-04	.0395	7.620E-04
HOT 4338(113)	21.70	20.69	4.558E-04	.0281	5.555E-04	.0342	6.239E-04	.0385	7.419E-04

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

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4/10/74

NASA-RI ONSO — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
42	0	7.94	211.7	1273	45.00	8.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R=.04 FT)	STREF (R=.04 FT)
93.5	.023	1.005	3763	2.042E-05	7.530E-08	1.021E 06	1.623E-02	2.662E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	79	.0486	4.634E-02	4.2658E-02
OP SIDE(OS)	7738	113	79	.0486	4.634E-02	4.2658E-02
BOTTOM(BOT)	8266	113	79	.0486	4.634E-02	4.2658E-02
TOP(TOP)	8197	194	79	.0526	1.567E-01	1.5887E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7261(194)	21.72	20.71	1.836E-03	.1132	2.292E-03	.1413	2.618E-03	.1613	2.976E-03
OS 2261(113)	21.72	20.71	4.555E-04	.0281	5.551E-04	.0342	6.236E-04	.0384	7.415E-04
NOS 8838(113)	21.72	20.71	4.555E-04	.0281	5.551E-04	.0342	6.236E-04	.0384	7.415E-04
TOP 7262(194)	22.80	21.79	1.790E-03	.1103	2.235E-03	.1377	2.552E-03	.1573	2.900E-03
OS 2262(113)	22.80	21.79	4.441E-04	.0274	5.412E-04	.0333	6.080E-04	.0375	7.226E-04
BOT 4339(113)	22.80	21.79	4.441E-04	.0274	5.412E-04	.0333	6.080E-04	.0375	7.226E-04
NOS 8839(113)	22.80	21.79	4.441E-04	.0274	5.412E-04	.0333	6.080E-04	.0375	7.226E-04
OS 2263(113)	23.88	22.87	4.336E-04	.0267	5.283E-04	.0325	5.935E-04	.0366	7.050E-04
BOT 4340(113)	23.88	22.87	4.336E-04	.0267	5.283E-04	.0325	5.935E-04	.0366	7.050E-04
TOP 7263(194)	23.90	22.89	1.747E-03	.1076	2.181E-03	.1343	2.490E-03	.1534	2.828E-03
NOS 8840(113)	23.90	22.89	4.333E-04	.0267	5.281E-04	.0325	5.932E-04	.0365	7.046E-04
TOP 7264(194)	24.98	23.97	1.707E-03	.1052	2.131E-03	.1313	2.434E-03	.1499	2.764E-03
OS 2264(113)	24.98	23.97	4.235E-04	.0261	5.161E-04	.0318	5.797E-04	.0357	6.887E-04
BOT 4341(113)	24.98	23.97	4.235E-04	.0261	5.161E-04	.0318	5.797E-04	.0357	6.887E-04
NOS 8841(113)	24.98	23.97	4.235E-04	.0261	5.161E-04	.0318	5.797E-04	.0357	6.887E-04
TOP 7265(194)	26.05	25.04	1.670E-03	.1029	2.085E-03	.1284	2.381E-03	.1467	2.704E-03
OS 2265(113)	26.05	25.04	4.143E-04	.0255	5.049E-04	.0311	5.671E-04	.0349	6.737E-04
BOT 4342(113)	26.05	25.04	4.143E-04	.0255	5.049E-04	.0311	5.671E-04	.0349	6.737E-04
NOS 8842(113)	26.05	25.04	4.143E-04	.0255	5.049E-04	.0311	5.671E-04	.0349	6.737E-04
OS 2266(113)	27.13	26.12	4.057E-04	.0250	4.943E-04	.0304	5.553E-04	.0342	6.593E-04
BOT 4343(113)	27.13	26.12	4.057E-04	.0250	4.943E-04	.0304	5.553E-04	.0342	6.593E-04
TOP 7266(194)	27.16	26.14	1.636E-03	.1007	2.041E-03	.1257	2.330E-03	.1435	2.646E-03
NOS 8843(113)	27.16	26.14	4.055E-04	.0250	4.941E-04	.0304	5.550E-04	.0342	6.593E-04
TOP 7267(194)	28.23	27.22	1.602E-03	.0986	2.000E-03	.1231	2.284E-03	.1406	2.590E-03
OS 2267(113)	28.23	27.22	3.974E-04	.0245	4.842E-04	.0298	5.439E-04	.0335	6.453E-04
BOT 4344(113)	28.23	27.22	3.974E-04	.0245	4.842E-04	.0298	5.439E-04	.0335	6.453E-04
NOS 8844(113)	28.23	27.22	3.974E-04	.0245	4.842E-04	.0298	5.439E-04	.0335	6.453E-04

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4/10/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
42	0	7.94	212.2	1273	45.00	8.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.023	1.007	3763	2.048E-05	7.530E-08	1.023E 06	1.624E-02	2.659E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	79	.0486	4.634E-02	4.2658E-02
OP SIDE(OS)	7738	113	79	.0486	4.634E-02	4.2658E-02
BOTTOM(BOT)	8246	113	79	.0486	4.634E-02	4.2658E-02
TOP(TOP)	8197	194	79	.0526	1.567E-01	1.5887E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7268(194)	29.31	28.30	1.571E-03	.0967	1.961E-03	.1208	2.240E-03	.1379	2.541E-03
OS 2268(113)	29.31	28.30	3.897E-04	.0240	4.749E-04	.0292	5.335E-04	.0328	6.332E-04
HOT 4345(113)	29.31	28.30	3.897E-04	.0240	4.749E-04	.0292	5.335E-04	.0328	6.332E-04
NOS 8845(113)	29.31	28.30	3.897E-04	.0240	4.662E-04	.0287	5.236E-04	.0322	6.212E-04
HOT 4346(113)	30.39	29.37	3.825E-04	.0235	1.924E-03	.1185	2.197E-03	.1353	2.493E-03
TOP 7269(194)	30.41	29.40	1.541E-03	.0949	4.660E-04	.0287	5.234E-04	.0322	6.212E-04
OS 2269(113)	30.41	29.40	3.824E-04	.0235	4.660E-04	.0287	5.234E-04	.0322	6.212E-04
NOS 8846(113)	30.41	29.40	3.824E-04	.0235	1.890E-03	.1164	2.158E-03	.1329	2.449E-03
TOP 7270(194)	31.49	30.47	1.514E-03	.0932	4.577E-04	.0282	5.141E-04	.0317	6.101E-04
OS 2270(113)	31.49	30.47	3.755E-04	.0231	4.577E-04	.0282	5.141E-04	.0317	6.101E-04
HOT 4347(113)	31.49	30.47	3.755E-04	.0231	4.577E-04	.0282	5.141E-04	.0317	6.101E-04
NOS 8847(113)	31.49	30.47	3.755E-04	.0231	1.857E-03	.1143	2.121E-03	.1306	2.405E-03
TOP 7271(194)	32.56	31.55	1.488E-03	.0916	4.498E-04	.0277	5.052E-04	.0311	5.994E-04
OS 2271(113)	32.56	31.55	3.691E-04	.0227	4.498E-04	.0277	5.052E-04	.0311	5.994E-04
HOT 4348(113)	32.56	31.55	3.691E-04	.0227	4.498E-04	.0277	5.052E-04	.0311	5.994E-04
NOS 8848(113)	32.56	31.55	3.691E-04	.0227	4.498E-04	.0277	5.052E-04	.0311	5.994E-04
	33.14		MODEL HAS LEFT CENTERLINE						
HOT 4349(113)	33.64	32.63	3.629E-04	.0223	4.423E-04	.0272	4.968E-04	.0306	5.894E-04
TOP 7272(194)	33.66	32.65	1.462E-03	.0900	1.826E-03	.1124	2.085E-03	.1283	2.363E-03
OS 2272(113)	33.66	32.65	3.629E-04	.0223	4.421E-04	.0272	4.966E-04	.0306	5.889E-04
NOS 8849(113)	33.66	32.65	3.629E-04	.0223	4.421E-04	.0272	4.966E-04	.0306	5.889E-04
TOF 7273(194)	34.74	33.73	1.439E-03	.0886	1.797E-03	.1106	2.051E-03	.1263	2.326E-03
OS 2273(113)	34.74	33.73	3.570E-04	.0220	4.350E-04	.0268	4.887E-04	.0301	5.797E-04
HOT 4350(113)	34.74	33.73	3.570E-04	.0220	4.350E-04	.0268	4.887E-04	.0301	5.797E-04
NOS 8850(113)	34.74	33.73	3.570E-04	.0220	4.350E-04	.0268	4.887E-04	.0301	5.797E-04

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NASA-RT 0H50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

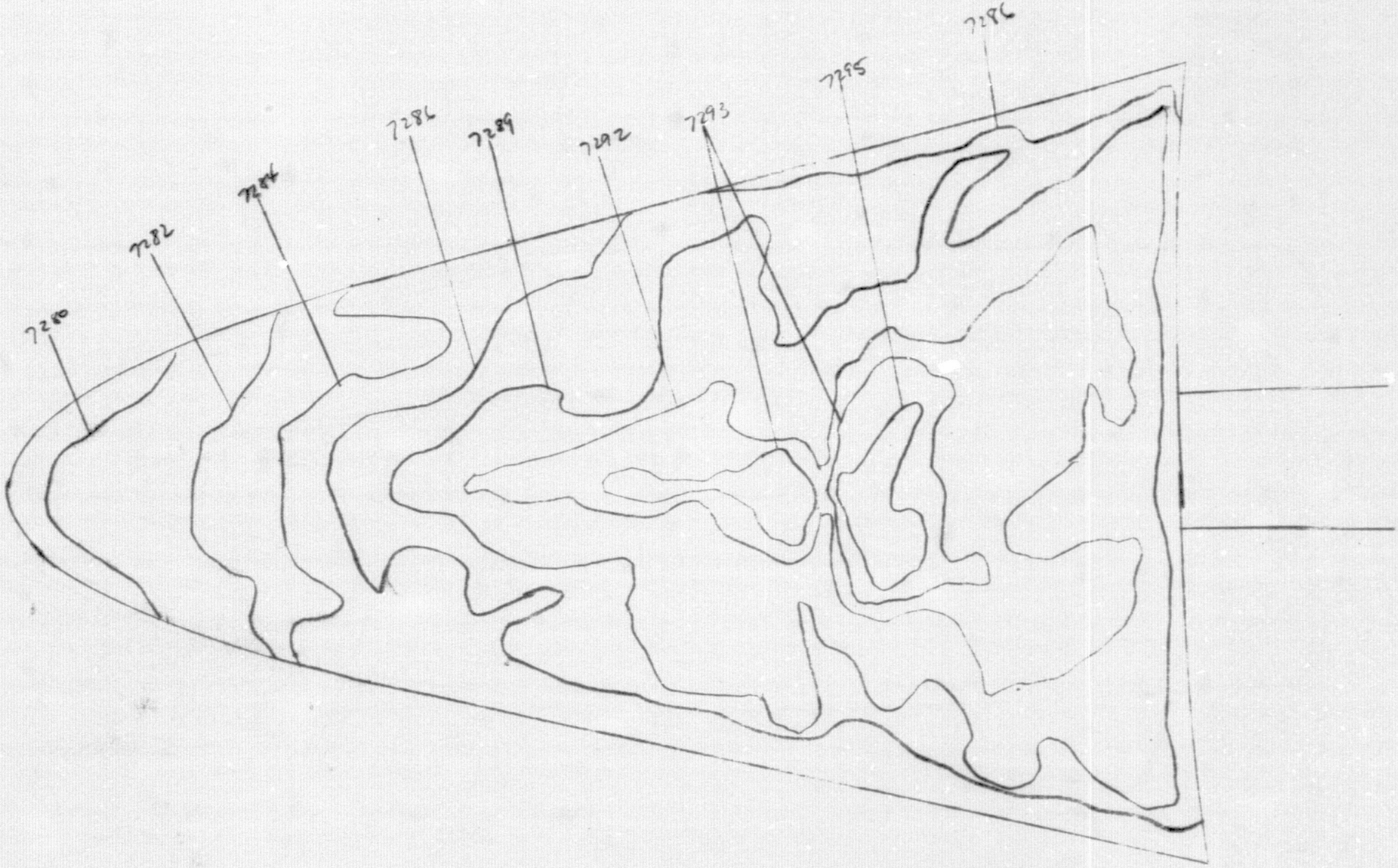
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREREQ	ROLL-MODEL	YAW
42	0	7.94	212.2	1273	45.00	8.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.5	.023	1.007	3763	2.048E-05	7.530E-08	1.023E 06	1.624E-02	2.659E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	79	.0486	4.634E-02	4.2658E-02
OP SIDE(OS)	7738	113	79	.0486	4.634E-02	4.2658E-02
BOTTOM(BOT)	8246	113	79	.0486	4.634E-02	4.2658E-02
TOP(TOP)	8197	194	79	.0526	1.567E-01	1.5887E-01

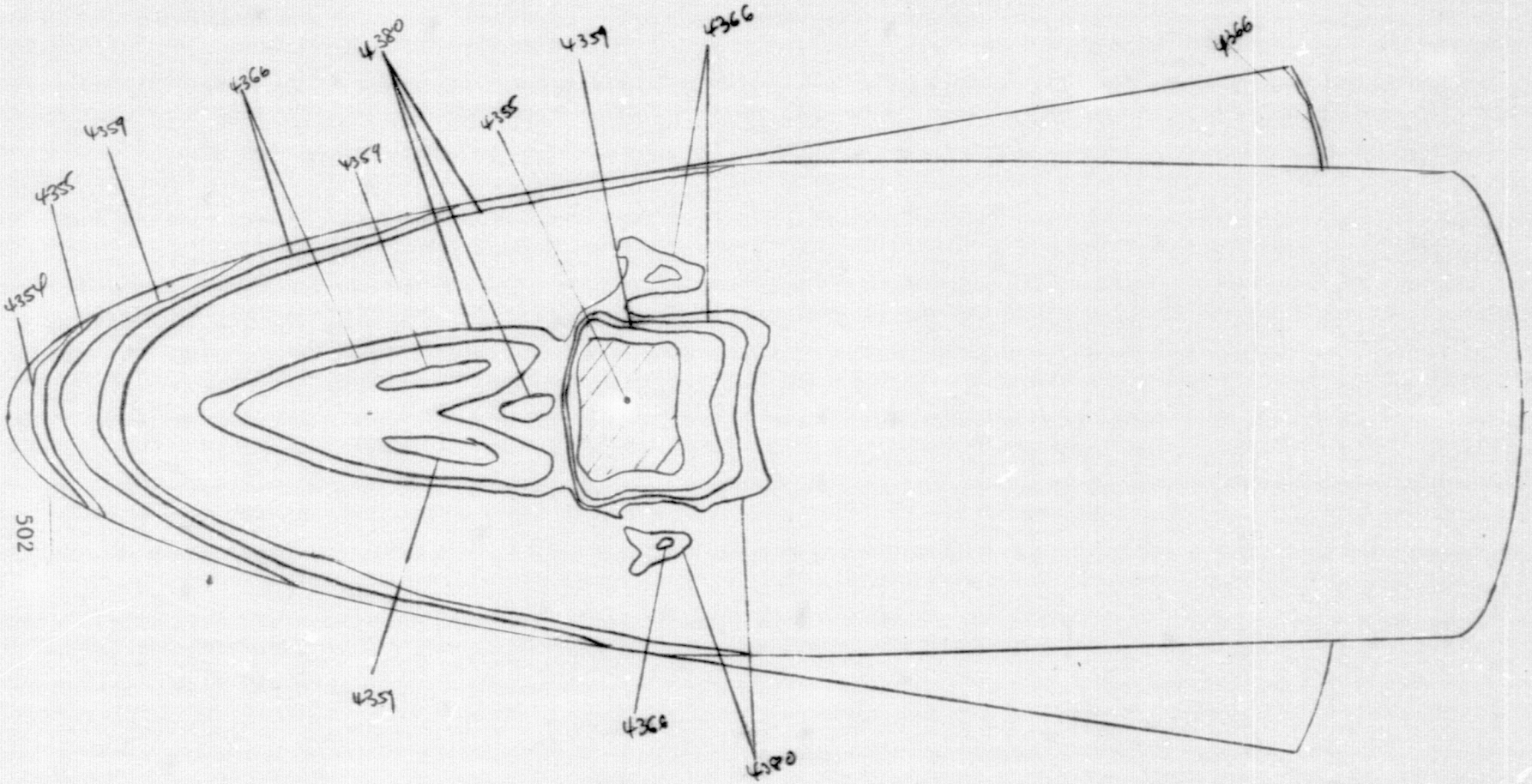
PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7274(194)	35.82	34.80	1.417E-03	.0872	1.769E-03	.1088	2.020E-03	.1243	2.289E-03
OS 2274(113)	35.82	34.80	3.514E-04	.0216	4.282E-04	.0264	4.810E-04	.0296	5.704E-04
BOT 4351(113)	35.82	34.80	3.514E-04	.0216	4.282E-04	.0264	4.810E-04	.0296	5.704E-04
NOS 8851(113)	35.82	34.80	3.514E-04	.0216	4.282E-04	.0264	4.810E-04	.0296	5.704E-04

500



501

GROUP 43
α = 45
ψ = 0



GROUP 43

$\alpha = 45$

$\psi = 0$

CONFIDENTIALITY OF THIS

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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4/10/74

NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
43	0	7.94	211.3	1272	44.98	8.02	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.4	.023	1.003	3761	2.041E-05	7.523E-08	1.020E 06	1.621E-02	2.663E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXX)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	86	.0486	0	0
OP SIDE(OS)	7738	113	86	.0486	0	0
BOTTOM(BOT)	8246	113	86	.0486	0	0
TOP(TOP)	8197	194	86	.0526	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TO 7275(194)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 2275(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
BO 4352(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 8852(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 7276(194)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 2276(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 4353(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 8853(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.78								
TOP 7277(194)	2.18	1.18	7.253E-03	.4476	9.059E-03	.5591	1.035E-02	.6388	1.178E-02
OS 2277(113)	2.18	1.18	1.519E-03	.0938	1.855E-03	.1145	2.085E-03	.1287	2.478E-03
BOT 4354(113)	2.18	1.18	1.519E-03	.0938	1.855E-03	.1145	2.085E-03	.1287	2.478E-03
NOS 8854(113)	2.18	1.18	1.519E-03	.0938	1.855E-03	.1145	2.085E-03	.1287	2.478E-03
TOP 7278(194)	3.25	2.26	5.245E-03	.3236	6.551E-03	.4042	7.485E-03	.4618	8.512E-03
OS 2278(113)	3.25	2.26	1.099E-03	.0678	1.341E-03	.0828	1.508E-03	.0930	1.791E-03
BOT 4355(113)	3.25	2.26	1.099E-03	.0678	1.341E-03	.0828	1.508E-03	.0930	1.791E-03
NOS 8855(113)	3.25	2.26	1.099E-03	.0678	1.341E-03	.0828	1.508E-03	.0930	1.791E-03
TOP 7279(194)	4.33	3.33	4.316E-03	.2663	5.391E-03	.3326	6.159E-03	.3800	7.004E-03
OS 2279(113)	4.33	3.33	9.041E-04	.0558	1.104E-03	.0681	1.241E-03	.0766	1.474E-03
BOT 4356(113)	4.33	3.33	9.041E-04	.0558	1.104E-03	.0681	1.241E-03	.0766	1.474E-03
NOS 8856(113)	4.33	3.33	9.041E-04	.0558	1.104E-03	.0681	1.241E-03	.0766	1.474E-03
BOT 4357(113)	5.41	4.41	7.861E-04	.0485	9.596E-04	.0592	1.079E-03	.0666	1.282E-03
TOP 7280(194)	5.43	4.43	3.741E-03	.2310	4.673E-03	.2885	5.340E-03	.3296	6.078E-03
OS 2280(113)	5.43	4.43	7.838E-04	.0484	9.569E-04	.0591	1.076E-03	.0664	1.279E-03
NOS 8857(113)	5.43	4.43	7.838E-04	.0484	9.569E-04	.0591	1.076E-03	.0664	1.279E-03
TOP 7281(194)	6.51	5.51	3.356E-03	.2071	4.192E-03	.2587	4.790E-03	.2956	5.450E-03
OS 2281(113)	6.51	5.51	7.031E-04	.0434	8.583E-04	.0530	9.650E-04	.0596	1.147E-03
BOT 4358(113)	6.51	5.51	7.031E-04	.0434	8.583E-04	.0530	9.650E-04	.0596	1.147E-03
NOS 8858(113)	6.51	5.51	7.031E-04	.0434	8.583E-04	.0530	9.650E-04	.0596	1.147E-03

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4/10/74

NASA-RI OH58

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
43	0	7.94	211.2	1272	44.98	8.02	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.4	.023	1.003	3761	2.040E-05	7.523E-08	1.020E 06	1.620E-02	2.663E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	86	.0486	3.721E-02	3.3960E-02
OP SIDE(OS)	7738	113	86	.0486	3.721E-02	3.3960E-02
BOTTOM(BOT)	8246	113	86	.0486	3.721E-02	3.3960E-02
TOP(TOP)	8197	194	86	.0526	1.489E-01	1.4977E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7282(194)	7.58	6.59	3.070E-03	.1895	3.834E-03	.2366	4.381E-03	.2704	4.984E-03
OS 2282(113)	7.58	6.59	6.431E-04	.0397	7.851E-04	.0485	8.826E-04	.0545	1.049E-03
BOT 4359(113)	7.58	6.59	6.431E-04	.0397	7.851E-04	.0485	8.826E-04	.0545	1.049E-03
NOS 8859(113)	7.58	6.59	6.431E-04	.0397	7.851E-04	.0485	8.826E-04	.0545	1.049E-03
TOP 7283(194)	8.68	7.69	2.841E-03	.1754	3.549E-03	.2190	4.055E-03	.2503	4.614E-03
OS 2283(113)	8.68	7.69	5.953E-04	.0367	7.267E-04	.0448	8.169E-04	.0504	9.708E-04
BOT 4360(113)	8.68	7.69	5.953E-04	.0367	7.267E-04	.0448	8.169E-04	.0504	9.708E-04
NOS 8860(113)	8.68	7.69	5.953E-04	.0367	7.267E-04	.0448	8.169E-04	.0504	9.708E-04
TOP 7284(194)	9.76	8.76	2.661E-03	.1643	3.324E-03	.2052	3.798E-03	.2344	4.323E-03
OS 2284(113)	9.76	8.76	5.575E-04	.0344	6.806E-04	.0420	7.651E-04	.0472	9.097E-04
BOT 4361(113)	9.76	8.76	5.575E-04	.0344	6.806E-04	.0420	7.651E-04	.0472	9.097E-04
NOS 8861(113)	9.76	8.76	5.575E-04	.0344	6.806E-04	.0420	7.651E-04	.0472	9.097E-04
BOT 4362(113)	10.84	9.84	5.262E-04	.0325	6.423E-04	.0396	7.221E-04	.0446	8.581E-04
TOP 7285(194)	10.86	9.86	2.508E-03	.1549	3.133E-03	.1935	3.586E-03	.2210	4.077E-03
OS 2285(113)	10.86	9.86	5.255E-04	.0324	6.415E-04	.0396	7.212E-04	.0445	8.578E-04
NOS 8862(113)	10.86	9.86	5.255E-04	.0324	6.415E-04	.0396	7.212E-04	.0445	8.578E-04
TOP 7286(194)	11.94	10.94	2.382E-03	.1471	2.975E-03	.1837	3.399E-03	.2099	3.871E-03
OS 2286(113)	11.94	10.94	4.990E-04	.0308	6.091E-04	.0376	6.848E-04	.0423	8.145E-04
BOT 4363(113)	11.94	10.94	4.990E-04	.0308	6.091E-04	.0376	6.848E-04	.0423	8.145E-04
NOS 8863(113)	11.94	10.94	4.990E-04	.0308	6.091E-04	.0376	6.848E-04	.0423	8.145E-04
OS 2287(113)	13.01	12.02	4.761E-04	.0294	5.812E-04	.0359	6.534E-04	.0403	7.768E-04
BOT 4364(113)	13.01	12.02	4.761E-04	.0294	5.812E-04	.0359	6.534E-04	.0403	7.768E-04
TOP 7287(194)	13.04	12.04	2.270E-03	.1401	2.836E-03	.1750	3.240E-03	.2000	3.688E-03
NOS 8864(113)	13.04	12.04	4.756E-04	.0294	5.806E-04	.0358	6.527E-04	.0403	7.760E-04
TOP 7288(194)	14.12	13.12	2.175E-03	.1343	2.717E-03	.1677	3.104E-03	.1916	3.534E-03
OS 2288(113)	14.12	13.12	4.557E-04	.0281	5.563E-04	.0343	6.254E-04	.0386	7.435E-04
BOT 4365(113)	14.12	13.12	4.557E-04	.0281	5.563E-04	.0343	6.254E-04	.0386	7.435E-04
NOS 8865(113)	14.12	13.12	4.557E-04	.0281	5.563E-04	.0343	6.254E-04	.0386	7.435E-04

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4/18/74

NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
43	0	7.94	211.1	1272	44.98	8.02	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.4	.023	1.002	3761	2.039E-05	7.523E-08	1.019E 06	1.620E-02	2.664E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	86	.0486	3.721E-02	3.3960E-02
OP SIDE(OS)	7738	113	86	.0486	3.721E-02	3.3960E-02
BOTTOM(BOT)	8246	113	86	.0486	3.721E-02	3.3960E-02
TOP(TOP)	8197	194	86	.0526	1.489E-01	1.4977E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7289(194)	15.19	14.19	2.091E-03	.1291	2.612E-03	.1613	2.984E-03	.1843	3.399E-03
OS 2289(113)	15.19	14.19	4.381E-04	.0270	5.348E-04	.0330	6.012E-04	.0371	7.151E-04
BOT 4368(113)	15.19	14.19	4.381E-04	.0270	5.348E-04	.0330	6.012E-04	.0371	7.151E-04
NOS 8866(113)	15.19	14.19	4.381E-04	.0270	5.348E-04	.0330	6.012E-04	.0371	7.151E-04
TOP 7290(194)	16.29	15.30	2.014E-03	.1244	2.516E-03	.1554	2.875E-03	.1775	3.275E-03
OS 2290(113)	16.29	15.30	4.220E-04	.0261	5.152E-04	.0318	5.791E-04	.0358	6.892E-04
BOT 4367(113)	16.29	15.30	4.220E-04	.0261	5.152E-04	.0318	5.791E-04	.0358	6.892E-04
NOS 8867(113)	16.29	15.30	4.220E-04	.0261	5.152E-04	.0318	5.791E-04	.0358	6.892E-04
TOP 7291(194)	17.37	16.37	1.947E-03	.1202	2.432E-03	.1502	2.779E-03	.1716	3.164E-03
OS 2291(113)	17.37	16.37	4.079E-04	.0252	4.979E-04	.0307	5.598E-04	.0346	6.659E-04
BOT 4368(113)	17.37	16.37	4.079E-04	.0252	4.979E-04	.0307	5.598E-04	.0346	6.659E-04
NOS 8868(113)	17.37	16.37	4.079E-04	.0252	4.979E-04	.0307	5.598E-04	.0346	6.659E-04
TOP 7292(194)	18.45	17.45	1.886E-03	.1165	2.356E-03	.1455	2.692E-03	.1663	3.068E-03
OS 2292(113)	18.45	17.45	3.951E-04	.0244	4.823E-04	.0298	5.422E-04	.0335	6.456E-04
BOT 4369(113)	18.45	17.45	3.951E-04	.0244	4.823E-04	.0298	5.422E-04	.0335	6.456E-04
NOS 8869(113)	18.45	17.45	3.951E-04	.0244	4.823E-04	.0298	5.422E-04	.0335	6.456E-04
TOP 7293(194)	19.55	18.55	1.829E-03	.1130	2.285E-03	.1411	2.610E-03	.1613	2.976E-03
OS 2293(113)	19.55	18.55	3.832E-04	.0237	4.678E-04	.0289	5.259E-04	.0325	6.261E-04
BOT 4370(113)	19.55	18.55	3.832E-04	.0237	4.678E-04	.0289	5.259E-04	.0325	6.261E-04
NOS 8870(113)	19.55	18.55	3.832E-04	.0237	4.678E-04	.0289	5.259E-04	.0325	6.261E-04
TOP 7294(194)	20.62	19.63	1.778E-03	.1098	2.221E-03	.1372	2.538E-03	.1567	2.892E-03
OS 2294(113)	20.62	19.63	3.726E-04	.0230	4.548E-04	.0281	5.113E-04	.0316	6.084E-04
BOT 4371(113)	20.62	19.63	3.726E-04	.0230	4.548E-04	.0281	5.113E-04	.0316	6.084E-04
NOS 8871(113)	20.62	19.63	3.726E-04	.0230	4.548E-04	.0281	5.113E-04	.0316	6.084E-04
OS 2295(113)	21.70	20.70	3.627E-04	.0224	4.428E-04	.0273	4.978E-04	.0307	5.924E-04

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4/10/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
43	0	7.94	218.9	1271	44.98	8.02	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.4	.023	1.001	3761	2.037E-05	7.522E-08	1.019E 06	1.619E-02	2.665E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	86	.0486	3.721E-02	3.3960E-02
OP SIDE(OS)	7738	113	86	.0486	3.721E-02	3.3960E-02
BOTTOM(BOT)	8246	113	86	.0486	3.721E-02	3.3960E-02
TOP(TOP)	8197	194	86	.0526	1.489E-01	1.4977E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7295(194)	21.72	20.73	1.730E-03	.1069	2.161E-03	.1335	2.470E-03	.1525	2.814E-03
BOT 4372(113)	21.72	20.73	3.625E-04	.0224	4.425E-04	.0273	4.975E-04	.0307	5.921E-04
NOS 8872(113)	21.72	20.73	3.625E-04	.0224	4.425E-04	.0273	4.975E-04	.0307	5.921E-04
TOP 7296(194)	22.80	21.80	1.687E-03	.1042	2.107E-03	.1302	2.408E-03	.1487	2.745E-03
OS 2296(113)	22.80	21.80	3.535E-04	.0218	4.315E-04	.0267	4.851E-04	.0300	5.775E-04
BOT 4373(113)	22.80	21.80	3.535E-04	.0218	4.315E-04	.0267	4.851E-04	.0300	5.775E-04
NOS 8873(113)	22.80	21.80	3.535E-04	.0218	4.315E-04	.0267	4.851E-04	.0300	5.775E-04
TOP 7297(194)	23.88	22.88	1.667E-03	.1017	2.057E-03	.1271	2.350E-03	.1452	2.679E-03
OS 2297(113)	23.88	22.88	3.450E-04	.0213	4.212E-04	.0260	4.735E-04	.0293	5.638E-04
BOT 4374(113)	23.88	22.88	3.450E-04	.0213	4.212E-04	.0260	4.735E-04	.0293	5.638E-04
NOS 8874(113)	23.88	22.88	3.450E-04	.0213	4.212E-04	.0260	4.735E-04	.0293	5.638E-04
BOT 4375(113)	24.95	23.96	3.372E-04	.0208	4.116E-04	.0254	4.626E-04	.0286	5.510E-04
TOP 7298(194)	24.98	23.98	1.609E-03	.0994	2.009E-03	.1242	2.296E-03	.1419	2.618E-03
OS 2298(113)	24.98	23.98	3.370E-04	.0208	4.114E-04	.0254	4.625E-04	.0286	5.509E-04
NOS 8875(113)	24.98	23.98	3.370E-04	.0208	4.114E-04	.0254	4.625E-04	.0286	5.509E-04
TOP 7299(194)	26.05	25.06	1.574E-03	.0972	1.966E-03	.1214	2.246E-03	.1387	2.560E-03
OS 2299(113)	26.05	25.06	3.297E-04	.0204	4.025E-04	.0249	4.525E-04	.0280	5.387E-04
BOT 4376(113)	26.05	25.06	3.297E-04	.0204	4.025E-04	.0249	4.525E-04	.0280	5.387E-04
NOS 8876(113)	26.05	25.06	3.297E-04	.0204	4.025E-04	.0249	4.525E-04	.0280	5.387E-04
TOP 7300(194)	27.13	26.13	1.541E-03	.0952	1.925E-03	.1189	2.199E-03	.1359	2.508E-03
OS 2300(113)	27.13	26.13	3.229E-04	.0199	3.941E-04	.0244	4.431E-04	.0274	5.278E-04
BOT 4377(113)	27.13	26.13	3.229E-04	.0199	3.941E-04	.0244	4.431E-04	.0274	5.278E-04
NOS 8877(113)	27.13	26.13	3.229E-04	.0199	3.941E-04	.0244	4.431E-04	.0274	5.278E-04
BOT 4378(113)	28.21	27.21	3.164E-04	.0195	3.862E-04	.0239	4.342E-04	.0268	5.170E-04
TOP 7301(194)	28.23	27.23	1.510E-03	.0933	1.886E-03	.1165	2.154E-03	.1331	2.456E-03
OS 2301(113)	28.23	27.23	3.163E-04	.0195	3.861E-04	.0238	4.340E-04	.0268	5.167E-04
NOS 8878(113)	28.23	27.23	3.163E-04	.0195	3.861E-04	.0238	4.340E-04	.0268	5.167E-04

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4/10/74

NASA-RI OH58
VA526

AEDC(ARO,INC) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PRESEND	ROLL-MODEL	YAW
43	8	7.94	210.8	1271	44.98	8.02	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.4	.023	1.001	3761	2.036E-05	7.522E-08	1.018E 06	1.619E-02	2.666E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	113	86	.0486	3.721E-02	3.3960E-02
OP SIDE(OS)	7738	113	86	.0486	3.721E-02	3.3960E-02
BOTTOM(BOT)	8246	113	86	.0486	3.721E-02	3.3960E-02
TOP(TOP)	8197	194	86	.0526	1.489E-01	1.4977E-01

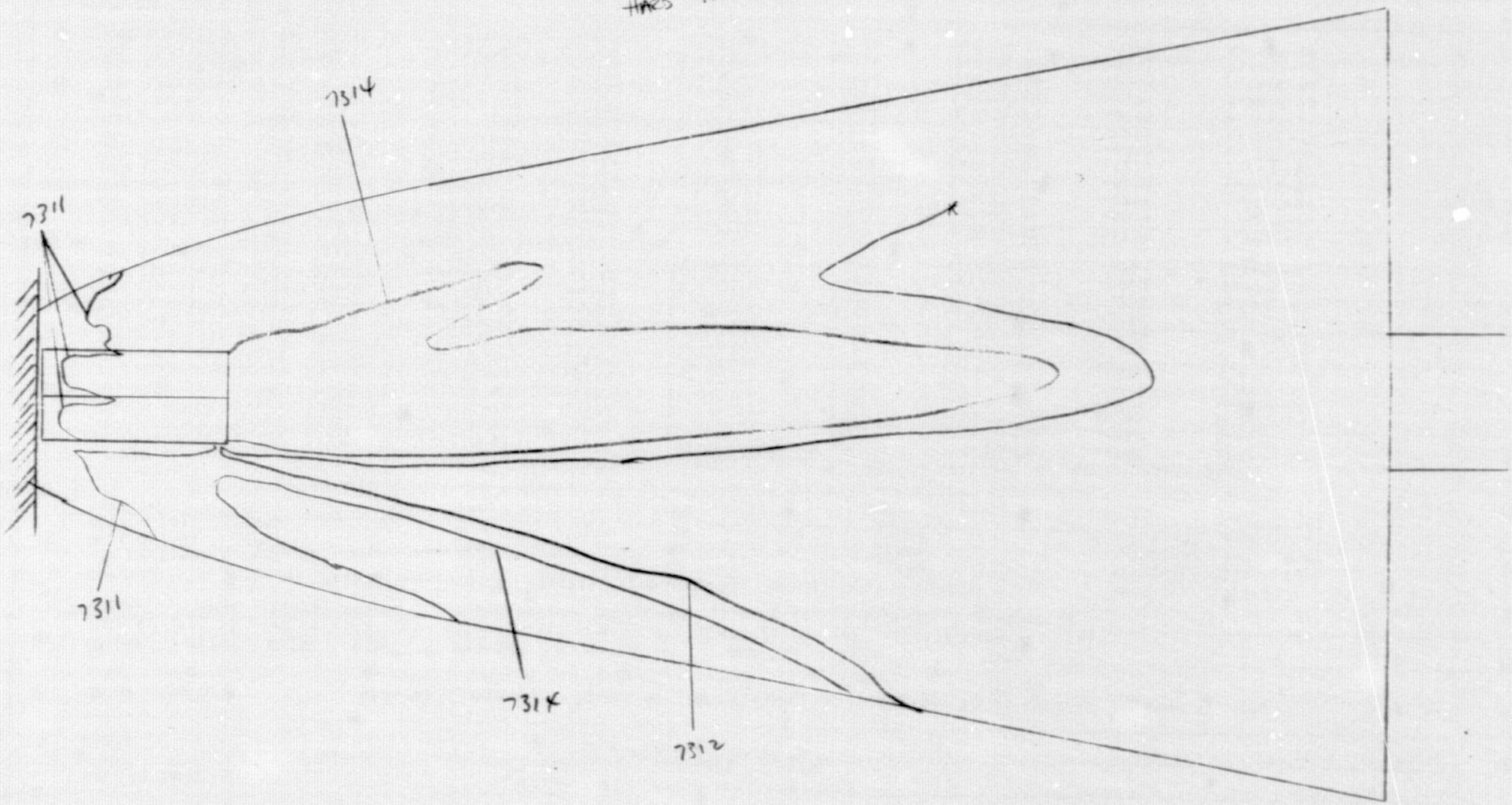
PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7302(194)	29.31	28.31	1.481E-03	.0915	1.849E-03	.1142	2.113E-03	.1305	2.409E-03
OS 2302(113)	29.31	28.31	3.102E-04	.0192	3.787E-04	.0234	4.257E-04	.0263	5.068E-04
BOT 4379(113)	29.31	28.31	3.102E-04	.0192	3.787E-04	.0234	4.257E-04	.0263	5.068E-04
NOS 8879(113)	29.31	28.31	3.102E-04	.0192	3.787E-04	.0234	4.257E-04	.0263	5.068E-04
OS 2303(113)	30.38	29.39	3.045E-04	.0188	3.717E-04	.0230	4.178E-04	.0258	4.977E-04
BOT 4380(113)	30.38	29.39	3.045E-04	.0188	3.717E-04	.0230	4.178E-04	.0258	4.977E-04
TOP 7303(194)	30.41	29.41	1.453E-03	.0898	1.814E-03	.1121	2.073E-03	.1281	2.364E-03
NOS 8880(113)	30.41	29.41	3.043E-04	.0188	3.715E-04	.0230	4.177E-04	.0258	4.975E-04
TOP 7304(194)	31.49	30.49	1.427E-03	.0881	1.782E-03	.1101	2.036E-03	.1258	2.321E-03
OS 2304(113)	31.49	30.49	2.989E-04	.0185	3.649E-04	.0225	4.102E-04	.0253	4.884E-04
BOT 4381(113)	31.49	30.49	2.989E-04	.0185	3.649E-04	.0225	4.102E-04	.0253	4.884E-04
NOS 8881(113)	31.49	30.49	2.989E-04	.0185	3.649E-04	.0225	4.102E-04	.0253	4.884E-04
	32.21		MODEL HAS LEFT CENTERLINE						
TOP 7305(194)	32.56	31.56	1.402E-03	.0866	1.752E-03	.1082	2.001E-03	.1237	2.282E-03
OS 2305(113)	32.56	31.56	2.938E-04	.0182	3.586E-04	.0222	4.032E-04	.0249	4.802E-04
BOT 4382(113)	32.56	31.56	2.938E-04	.0182	3.586E-04	.0222	4.032E-04	.0249	4.802E-04
NOS 8882(113)	32.56	31.56	2.938E-04	.0182	3.586E-04	.0222	4.032E-04	.0249	4.802E-04
TOP 7306(194)	33.66	32.67	1.378E-03	.0852	1.722E-03	.1064	1.967E-03	.1216	2.243E-03
OS 2306(113)	33.66	32.67	2.888E-04	.0178	3.525E-04	.0218	3.963E-04	.0245	4.720E-04
BOT 4383(113)	33.66	32.67	2.888E-04	.0178	3.525E-04	.0218	3.963E-04	.0245	4.720E-04
NOS 8883(113)	33.66	32.67	2.889E-04	.0178	3.525E-04	.0218	3.963E-04	.0245	4.720E-04
TOP 7307(194)	34.74	33.74	1.356E-03	.0838	1.694E-03	.1047	1.936E-03	.1196	2.206E-03
OS 2307(113)	34.74	33.74	2.841E-04	.0176	3.468E-04	.0214	3.899E-04	.0241	4.642E-04
BOT 4384(113)	34.74	33.74	2.841E-04	.0176	3.468E-04	.0214	3.899E-04	.0241	4.642E-04
NOS 8884(113)	34.74	33.74	2.841E-04	.0176	3.468E-04	.0214	3.899E-04	.0241	4.642E-04

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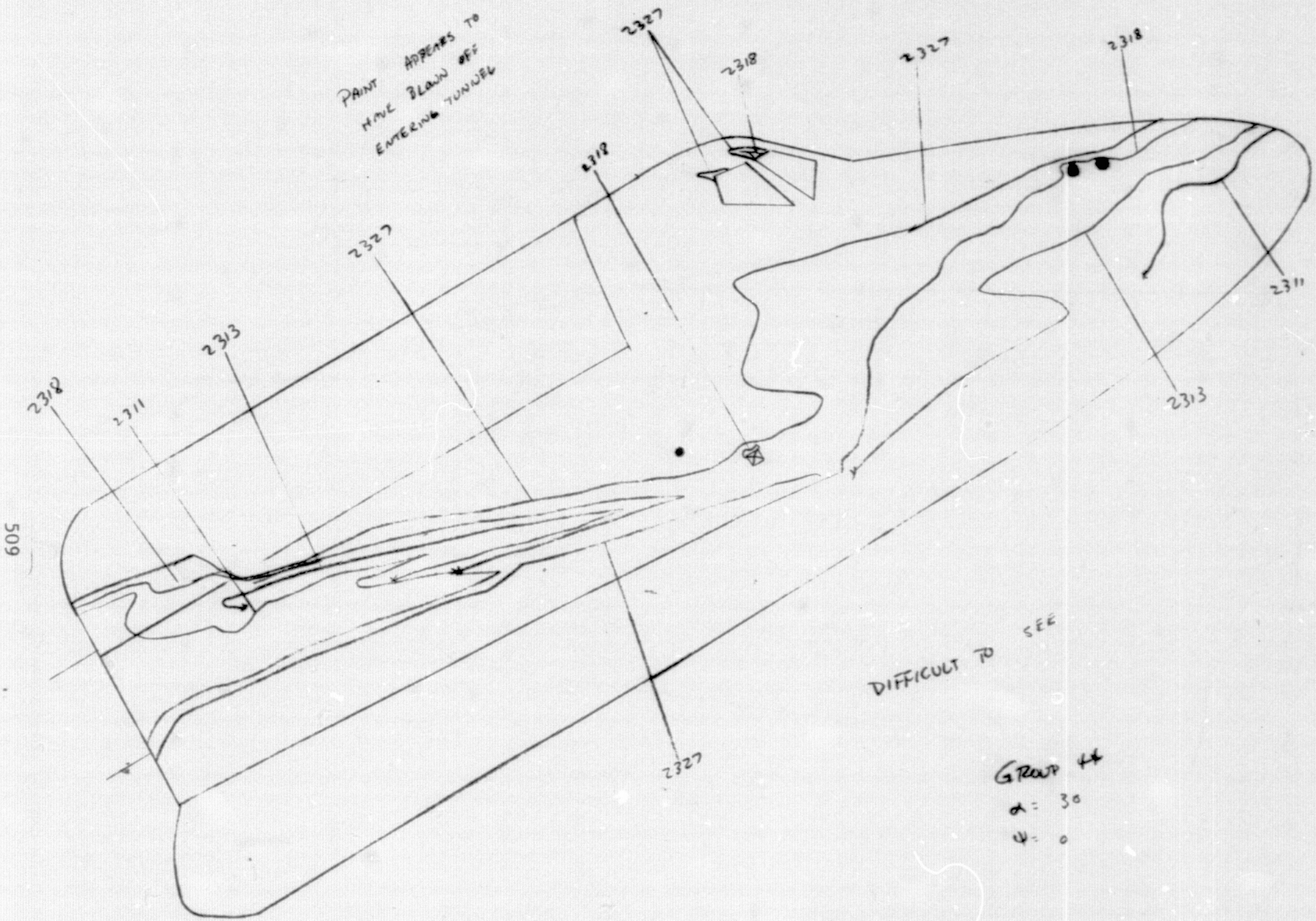


GROUP 44

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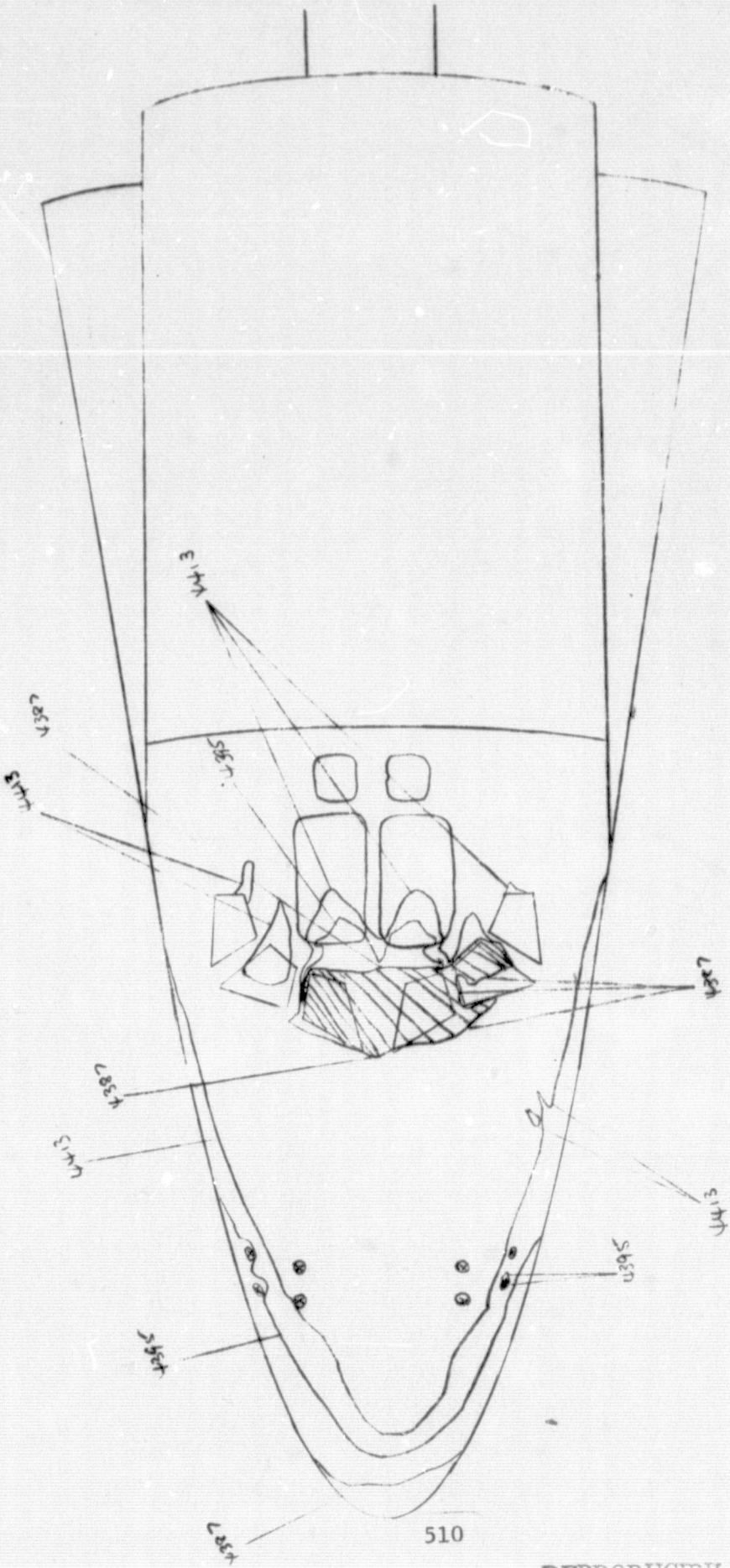
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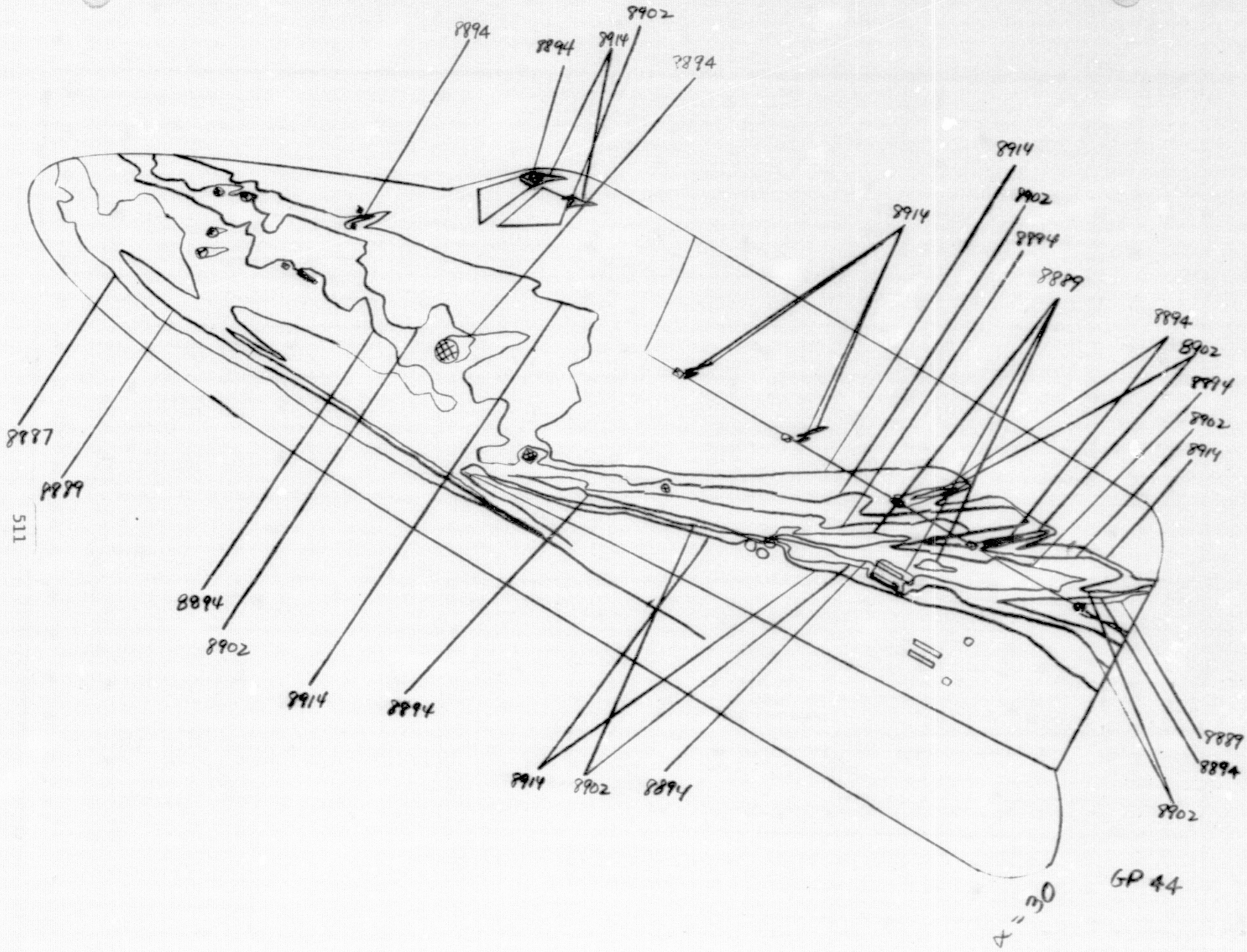

PAINT APPEARS TO HAVE BLOWN OFF ENTERING TUNNEL
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REPRODUCIBILITY OF THE



REPRODUCIBILITY OF THE
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GP 44
4" = 30

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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4/10/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREREND	ROLL-MODEL	YAW
44	0	7.97	324.8	1267	29.99	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	U-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.9	.034	1.516	3786	3.046E-05	7.583E-09	1.525E 06	1.996E-02	2.182E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7499	125	85	.0493	0	0
OP SIDE(OS)	7738	125	85	.0493	0	0
BOTTOM(BOT)	8246	125	85	.0493	0	0
TOP(TOP)	8197	194	85	.0526	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 7308(194)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 2308(125)	.05		MODEL HAS NOT REACHED CENTERLINE						
HO 4385(125)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 8885(125)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 7309(194)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 2309(125)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 4386(125)	1.13		MODEL HAS NOT REACHED CENTERLINE						
NO 8886(125)	1.13		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.80								
TOP 7310(194)	2.20	1.19	7.109E-03	.3558	8.855E-03	.4432	1.010E-02	.5053	7.666E-03
OS 2310(125)	2.20	1.19	2.255E-03	.1129	2.754E-03	.1379	3.096E-03	.1549	2.441E-03
HOT 4387(125)	2.20	1.19	2.255E-03	.1129	2.754E-03	.1379	3.096E-03	.1549	2.441E-03
NOS 8887(125)	2.20	1.19	2.255E-03	.1129	2.754E-03	.1379	3.096E-03	.1549	2.441E-03
TOP 7311(194)	3.29	2.27	5.152E-03	.2577	6.418E-03	.3210	7.317E-03	.3660	5.547E-03
OS 2311(125)	3.28	2.27	1.835E-03	.0918	1.996E-03	.0998	2.244E-03	.1122	1.767E-03
HOT 4388(125)	3.28	2.27	1.835E-03	.0918	1.996E-03	.0998	2.244E-03	.1122	1.767E-03
NOS 8888(125)	3.28	2.27	1.835E-03	.0918	1.996E-03	.0998	2.244E-03	.1122	1.767E-03
TOP 7312(194)	4.36	3.34	4.243E-03	.2122	5.285E-03	.2643	6.025E-03	.3013	4.566E-03
HOT 4389(125)	4.36	3.34	1.646E-03	.0673	1.644E-03	.0822	1.848E-03	.0924	1.454E-03
OS 2312(125)	4.38	3.37	1.341E-03	.0670	1.638E-03	.0819	1.841E-03	.0920	1.448E-03
NOS 8889(125)	4.38	3.37	1.341E-03	.0670	1.638E-03	.0819	1.841E-03	.0920	1.448E-03
TOP 7313(194)	5.46	4.44	3.682E-03	.1839	4.583E-03	.2291	5.226E-03	.2612	3.957E-03
OS 2313(125)	5.46	4.44	1.167E-03	.0584	1.426E-03	.0713	1.602E-03	.0801	1.260E-03
HOT 4390(125)	5.46	4.44	1.167E-03	.0584	1.426E-03	.0713	1.602E-03	.0801	1.260E-03
NOS 8890(125)	5.46	4.44	1.167E-03	.0584	1.426E-03	.0713	1.602E-03	.0801	1.260E-03
TOP 7314(194)	6.53	5.52	3.302E-03	.1650	4.113E-03	.2055	4.689E-03	.2343	3.549E-03
OS 2314(125)	6.53	5.52	1.049E-03	.0523	1.279E-03	.0639	1.438E-03	.0718	1.130E-03
HOT 4391(125)	6.53	5.52	1.049E-03	.0523	1.279E-03	.0639	1.438E-03	.0718	1.130E-03
NOS 8891(125)	6.53	5.52	1.049E-03	.0523	1.279E-03	.0639	1.438E-03	.0718	1.130E-03

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4/10/74

NASA-RI OMFO — AEDC(AMD)(INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREHEND	ROLL-MODEL	YAW
44	0	7.97	326.3	1287	29.99	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	ML-INF (LB-SEC/FT2)	PF/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.9	.034	1.523	3765	3.655E-05	7.551E-08	1.531E 06	2.001E-02	2.178E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAK)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7499	125	85	.0493	5.390E-02	4.9925E-02
UP SIDE(US)	7738	125	85	.0493	5.390E-02	4.9925E-02
BOTTOM(BOT)	8246	125	85	.0493	5.390E-02	4.9925E-02
TOP(TOP)	8197	194	85	.0526	1.469E-01	1.4749E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
US 2315(125)	7.61	6.60	9.553E-04	.0479	1.170E-03	.0585	1.315E-03	.0657	1.033E-03
HOT 4392(125)	7.61	6.60	9.553E-04	.0479	1.170E-03	.0585	1.315E-03	.0657	1.033E-03
TOP 7315(194)	7.63	6.62	3.015E-03	.1506	3.765E-03	.1876	4.241E-03	.2139	3.239E-03
NOS 8852(125)	7.63	6.62	9.555E-04	.0478	1.168E-03	.0583	1.313E-03	.0656	1.031E-03
TOP 7316(194)	8.71	7.70	2.794E-03	.1396	3.483E-03	.1739	3.971E-03	.1983	3.001E-03
US 2316(125)	8.71	7.70	8.871E-04	.0443	1.083E-03	.0541	1.218E-03	.0608	9.557E-04
HOT 4393(125)	8.71	7.70	8.871E-04	.0443	1.083E-03	.0541	1.218E-03	.0608	9.557E-04
NOS 8853(125)	8.71	7.70	8.871E-04	.0443	1.083E-03	.0541	1.218E-03	.0608	9.557E-04
TOP 7317(194)	9.79	8.77	2.419E-03	.1208	3.262E-03	.1629	3.719E-03	.1857	2.811E-03
US 2317(125)	9.79	8.77	8.509E-04	.0425	1.015E-03	.0507	1.140E-03	.0569	8.952E-04
HOT 4394(125)	9.79	8.77	8.509E-04	.0425	1.015E-03	.0507	1.140E-03	.0569	8.952E-04
NOS 8854(125)	9.79	8.77	8.509E-04	.0425	1.015E-03	.0507	1.140E-03	.0569	8.952E-04
TOP 7318(194)	10.89	9.88	2.649E-03	.1323	3.375E-03	.1535	3.506E-03	.1750	2.648E-03
US 2318(125)	10.89	9.88	7.832E-04	.0391	9.565E-04	.0477	1.075E-03	.0537	8.433E-04
HOT 4395(125)	10.89	9.88	7.832E-04	.0391	9.565E-04	.0477	1.075E-03	.0537	8.433E-04
NOS 8855(125)	10.89	9.88	7.832E-04	.0391	9.565E-04	.0477	1.075E-03	.0537	8.433E-04
TOP 7319(194)	11.96	10.95	2.344E-03	.1169	2.920E-03	.1457	3.329E-03	.1661	2.512E-03
US 2319(125)	11.96	10.95	7.437E-04	.0371	9.082E-04	.0453	1.021E-03	.0509	7.999E-04
HOT 4396(125)	11.96	10.95	7.437E-04	.0371	9.082E-04	.0453	1.021E-03	.0509	7.999E-04
NOS 8856(125)	11.96	10.95	7.437E-04	.0371	9.082E-04	.0453	1.021E-03	.0509	7.999E-04
HOT 4397(125)	13.04	12.03	7.097E-04	.0354	8.667E-04	.0432	9.740E-04	.0486	7.632E-04
TOP 7320(194)	13.07	12.05	2.235E-03	.1114	2.783E-03	.1388	3.173E-03	.1583	2.393E-03
US 2320(125)	13.07	12.05	7.089E-04	.0354	8.658E-04	.0432	9.730E-04	.0485	7.620E-04
NOS 8857(125)	13.07	12.05	7.089E-04	.0354	8.658E-04	.0432	9.730E-04	.0485	7.620E-04
TOP 7321(194)	14.14	13.13	2.141E-03	.1068	2.667E-03	.1330	3.041E-03	.1517	2.293E-03
US 2321(125)	14.14	13.13	6.793E-04	.0339	8.295E-04	.0414	9.323E-04	.0465	7.303E-04
HOT 4398(125)	14.14	13.13	6.793E-04	.0339	8.295E-04	.0414	9.323E-04	.0465	7.303E-04
NOS 8858(125)	14.14	13.13	6.793E-04	.0339	8.295E-04	.0414	9.323E-04	.0465	7.303E-04

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NASA-PT OH50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
44	0	7.97	327.5	1287	29.99	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	U-INF (FT/SEC)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.9	.039	1.52E	3765	3.70E-05	7.562E-08	1.837E 06	2.005E-02	2.174E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TRAN(TO)	BETA(TO)
NOR SIDE(NOS)	7499	125	85	.0493	5.390E-02	4.9925E-02
UP SIDE(US)	7738	125	85	.0493	5.390E-02	4.9925E-02
BOTTOM(BOT)	8246	125	85	.0493	5.390E-02	4.9925E-02
TOP(TOP)	8197	194	85	.0526	1.469E-01	1.4749E-01

PIC NO	TIME	DELTIME	H(IO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
HOT 4399(125)	15.22	14.21	6.530E-04	.0326	7.975E-04	.0398	8.953E-04	.0447	7.015E-04
TOP 7322(194)	15.24	14.23	2.56E-03	.1025	2.562E-03	.1277	2.921E-03	.1456	2.201E-03
OS 2322(125)	15.24	14.23	6.525E-04	.0325	7.968E-04	.0397	8.955E-04	.0445	7.008E-04
NOS 8499(125)	15.24	14.23	6.525E-04	.0325	7.968E-04	.0397	8.955E-04	.0446	7.008E-04
TOP 7323(194)	16.32	15.31	1.98?E-03	.0988	2.470E-03	.1230	2.816E-03	.1403	2.119E-03
OS 2323(125)	16.32	15.31	6.291E-04	.0313	7.683E-04	.0383	8.634E-04	.0430	6.747E-04
HOT 4400(125)	16.32	15.31	6.291E-04	.0313	7.683E-04	.0383	8.634E-04	.0430	6.747E-04
NOS 8500(125)	16.32	15.31	6.291E-04	.0313	7.683E-04	.0383	8.634E-04	.0430	6.747E-04
TOP 7324(194)	17.40	16.38	1.917E-03	.0955	2.387E-03	.1190	2.722E-03	.1357	2.050E-03
OS 2324(125)	17.40	16.38	6.061E-04	.0303	7.420E-04	.0370	8.346E-04	.0416	6.528E-04
HOT 4401(125)	17.40	16.38	6.061E-04	.0303	7.420E-04	.0370	8.346E-04	.0416	6.528E-04
NOS 8501(125)	17.40	16.38	6.061E-04	.0303	7.420E-04	.0370	8.346E-04	.0416	6.528E-04
TOP 7325(194)	18.50	17.48	1.855E-03	.0926	2.311E-03	.1151	2.635E-03	.1312	1.982E-03
OS 2325(125)	18.50	17.48	5.846E-04	.0293	7.188E-04	.0358	8.079E-04	.0402	6.311E-04
HOT 4402(125)	18.50	17.48	5.846E-04	.0293	7.188E-04	.0358	8.079E-04	.0402	6.311E-04
NOS 8502(125)	18.50	17.48	5.846E-04	.0293	7.188E-04	.0358	8.079E-04	.0402	6.311E-04
TOP 7326(194)	19.57	18.56	1.801E-03	.0897	2.243E-03	.1117	2.557E-03	.1274	1.923E-03
OS 2326(125)	19.57	18.56	5.713E-04	.0285	6.977E-04	.0347	7.841E-04	.0391	6.124E-04
HOT 4403(125)	19.57	18.56	5.713E-04	.0285	6.977E-04	.0347	7.841E-04	.0391	6.124E-04
NOS 8503(125)	19.57	18.56	5.713E-04	.0285	6.977E-04	.0347	7.841E-04	.0391	6.124E-04
HOT 4404(125)	20.65	19.64	5.554E-04	.0277	6.783E-04	.0338	7.623E-04	.0380	5.948E-04
TOP 7327(194)	20.67	19.66	1.750E-03	.0871	2.179E-03	.1085	2.448E-03	.1237	1.867E-03
OS 2327(125)	20.67	19.66	5.551E-04	.0276	6.779E-04	.0338	7.618E-04	.0379	5.946E-04
NOS 8504(125)	20.67	19.66	5.551E-04	.0276	6.779E-04	.0338	7.618E-04	.0379	5.946E-04
TOP 7328(194)	21.75	20.74	1.704E-03	.0848	2.122E-03	.1056	2.419E-03	.1204	1.816E-03
OS 2328(125)	21.75	20.74	5.405E-04	.0269	6.600E-04	.0328	7.418E-04	.0369	5.783E-04
HOT 4405(125)	21.75	20.74	5.405E-04	.0269	6.600E-04	.0328	7.418E-04	.0369	5.783E-04
NOS 8505(125)	21.75	20.74	5.405E-04	.0269	6.600E-04	.0328	7.418E-04	.0369	5.783E-04

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NASA-RT OH50
VAS26

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
44	0	7.97	329.1	1287	29.99	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.9	.035	1.536	3785	3.095E-05	7.562E-08	1.544E 06	2.010E-02	2.169E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TMAR(TO)	BETA(TO)
NOF SIDE(NOS)	7499	125	85	.0493	5.390E-02	4.9925E-02
OP SIDE(OS)	7738	125	85	.0493	5.390E-02	4.9925E-02
MOTTOM(BOT)	8246	125	85	.0493	5.390E-02	4.9925E-02
TOP(TOP)	8197	194	85	.0526	1.469E-01	1.4749E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7329(194)	22.83	21.81	1.661E-03	.0827	2.069E-03	.1030	2.359E-03	.1174	1.771E-03
OS 7329(125)	22.83	21.81	5.270E-04	.0262	6.435E-04	.0320	7.233E-04	.0360	5.640E-04
MOT 4406(125)	22.83	21.81	5.270E-04	.0262	6.435E-04	.0320	7.233E-04	.0360	5.640E-04
NOS 8906(125)	22.83	21.81	5.270E-04	.0262	6.435E-04	.0320	7.233E-04	.0360	5.640E-04
TOP 7330(194)	23.93	22.89	1.621E-03	.0807	2.020E-03	.1005	2.303E-03	.1145	1.727E-03
OS 7330(125)	23.93	22.92	5.142E-04	.0256	6.279E-04	.0312	7.057E-04	.0351	5.498E-04
MOT 4407(125)	23.93	22.92	5.142E-04	.0256	6.279E-04	.0312	7.057E-04	.0351	5.498E-04
NOS 8907(125)	23.93	22.92	5.142E-04	.0256	6.279E-04	.0312	7.057E-04	.0351	5.498E-04
TOP 7331(194)	25.00	23.99	1.584E-03	.0788	1.973E-03	.0981	2.249E-03	.1119	1.687E-03
OS 7331(125)	25.00	23.99	5.125E-04	.0250	6.136E-04	.0305	6.897E-04	.0343	5.372E-04
MOT 4408(125)	25.00	23.99	5.025E-04	.0250	6.136E-04	.0305	6.897E-04	.0343	5.372E-04
NOS 8908(125)	25.00	23.99	5.025E-04	.0250	6.136E-04	.0305	6.897E-04	.0343	5.372E-04
TOP 7332(194)	26.08	25.07	1.549E-03	.0771	1.930E-03	.0960	2.200E-03	.1094	1.650E-03
OS 7332(125)	26.08	25.07	4.916E-04	.0244	6.003E-04	.0299	6.747E-04	.0336	5.255E-04
MOT 4409(125)	26.11	25.09	4.913E-04	.0244	6.000E-04	.0298	6.744E-04	.0335	5.253E-04
NOS 8909(125)	26.11	25.09	4.913E-04	.0244	6.000E-04	.0298	6.744E-04	.0335	5.253E-04
TOP 7333(194)	27.18	26.17	1.516E-03	.0754	1.889E-03	.0939	2.154E-03	.1070	1.613E-03
OS 7333(125)	27.18	26.17	4.811E-04	.0239	5.876E-04	.0292	6.604E-04	.0328	5.136E-04
MOT 4410(125)	27.18	26.17	4.811E-04	.0239	5.876E-04	.0292	6.604E-04	.0328	5.136E-04
NOS 8910(125)	27.18	26.17	4.811E-04	.0239	5.876E-04	.0292	6.604E-04	.0328	5.136E-04
TOP 7334(194)	28.26	27.25	1.486E-03	.0739	1.851E-03	.0920	2.111E-03	.1049	1.580E-03
OS 7334(125)	28.26	27.25	4.715E-04	.0234	5.758E-04	.0286	6.472E-04	.0322	5.032E-04
MOT 4411(125)	28.26	27.25	4.715E-04	.0234	5.758E-04	.0286	6.472E-04	.0322	5.032E-04
NOS 8911(125)	28.26	27.25	4.715E-04	.0234	5.758E-04	.0286	6.472E-04	.0322	5.032E-04
MOT 4412(125)	29.33	28.32	4.625E-04	.0230	5.648E-04	.0280	6.348E-04	.0315	4.929E-04

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NASA-RI OH50

AEDC(AHO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VAS2R

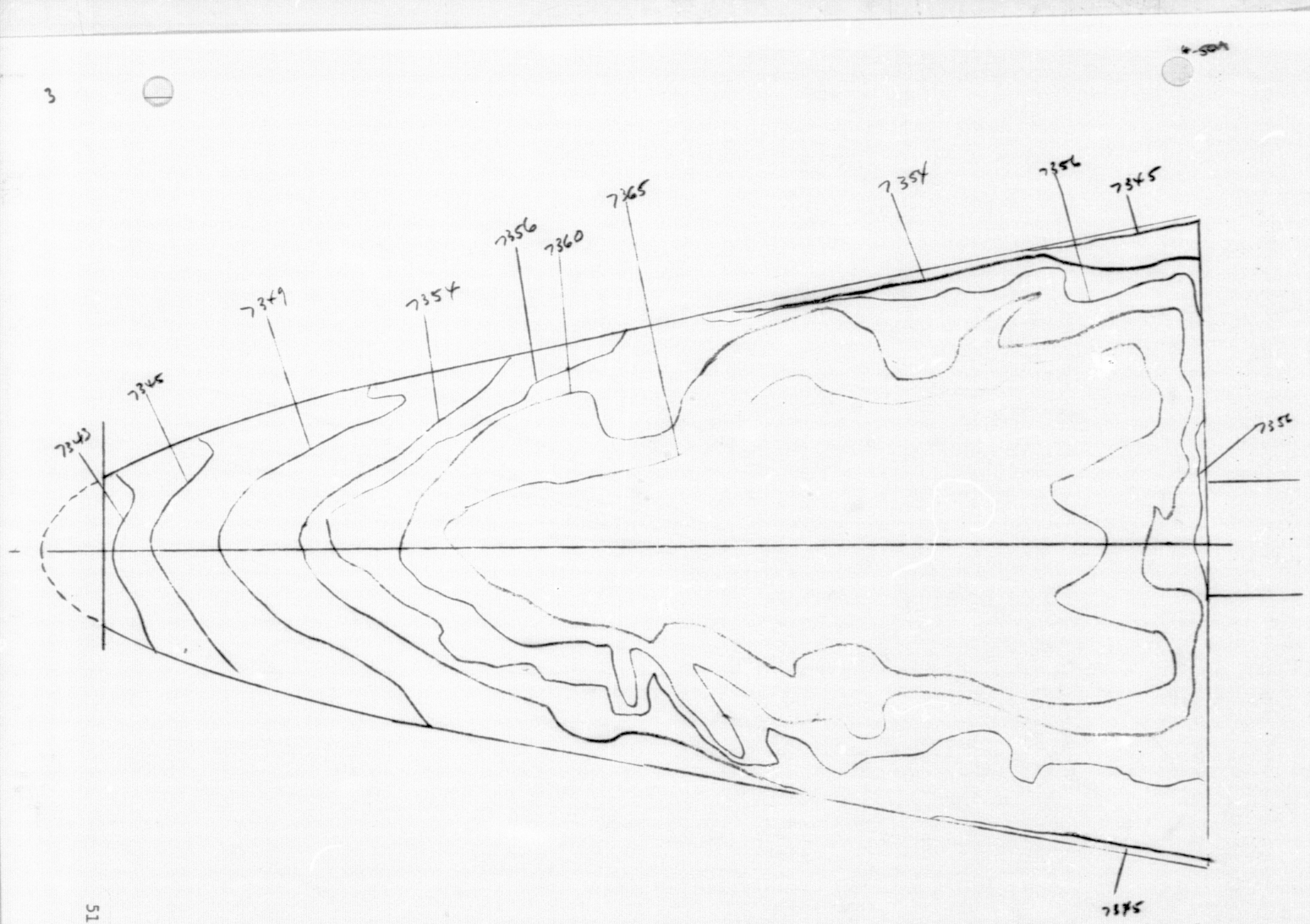
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
44	0	7.97	330.4	1287	29.99	.01	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (R= .04 FT)	STREF (R= .04 FT)
93.9	.035	1.542	3785	3.097E-05	7.563E-08	1.550E 06	2.014E-02	2.164E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7499	125	85	.0493	5.390E-02	4.9925E-02
UP SIDE(US)	7738	125	85	.0493	5.390E-02	4.9925E-02
BOTTOM(BOT)	8246	125	85	.0493	5.390E-02	4.9925E-02
TOP(TOP)	8197	194	85	.0526	1.469E-01	1.4749E-01

PIC NO	TIME RELTIVE		H(TO)	H(TO)/RREF	H(.9TO)	H(.9TO)/RREF	H(.912TO)	H(.912TO)/RREF	ST(TO)
TOP 7335(194)	29.36	28.35	1.457E-03	.0724	1.815E-03	.0901	2.069E-03	.1028	1.547E-03
US 7335(125)	29.36	28.35	4.623E-04	.0230	5.645E-04	.0280	6.345E-04	.0315	4.927E-04
NOS 8912(125)	29.36	28.35	4.623E-04	.0230	5.645E-04	.0280	6.345E-04	.0315	4.927E-04
TOP 7336(194)	30.44	29.42	1.430E-03	.0710	1.781E-03	.0885	2.031E-03	.1009	1.518E-03
OS 7336(125)	30.44	29.42	4.539E-04	.0225	5.541E-04	.0275	6.228E-04	.0309	4.835E-04
HOT 4413(125)	30.44	29.42	4.539E-04	.0225	5.541E-04	.0275	6.228E-04	.0309	4.835E-04
NOS 8913(125)	30.44	29.42	4.539E-04	.0225	5.541E-04	.0275	6.228E-04	.0309	4.835E-04
TOP 7337(194)	31.51	30.50	1.405E-03	.0697	1.750E-03	.0869	1.995E-03	.0990	1.491E-03
US 7337(125)	31.51	30.50	4.457E-04	.0221	5.443E-04	.0270	6.117E-04	.0304	4.747E-04
HOT 4414(125)	31.51	30.50	4.457E-04	.0221	5.443E-04	.0270	6.117E-04	.0304	4.747E-04
NOS 8914(125)	31.51	30.50	4.457E-04	.0221	5.443E-04	.0270	6.117E-04	.0304	4.747E-04
	32.14		MODEL HAS LEFT CENTERLINE						
TOP 7338(194)	32.61	31.60	1.360E-03	.0685	1.719E-03	.0853	1.960E-03	.0973	1.464E-03
US 7338(125)	32.61	31.60	4.378E-04	.0217	5.347E-04	.0265	6.009E-04	.0298	4.663E-04
HOT 4415(125)	32.61	31.60	4.378E-04	.0217	5.347E-04	.0265	6.009E-04	.0298	4.663E-04
NOS 8915(125)	32.61	31.60	4.378E-04	.0217	5.347E-04	.0265	6.009E-04	.0298	4.663E-04

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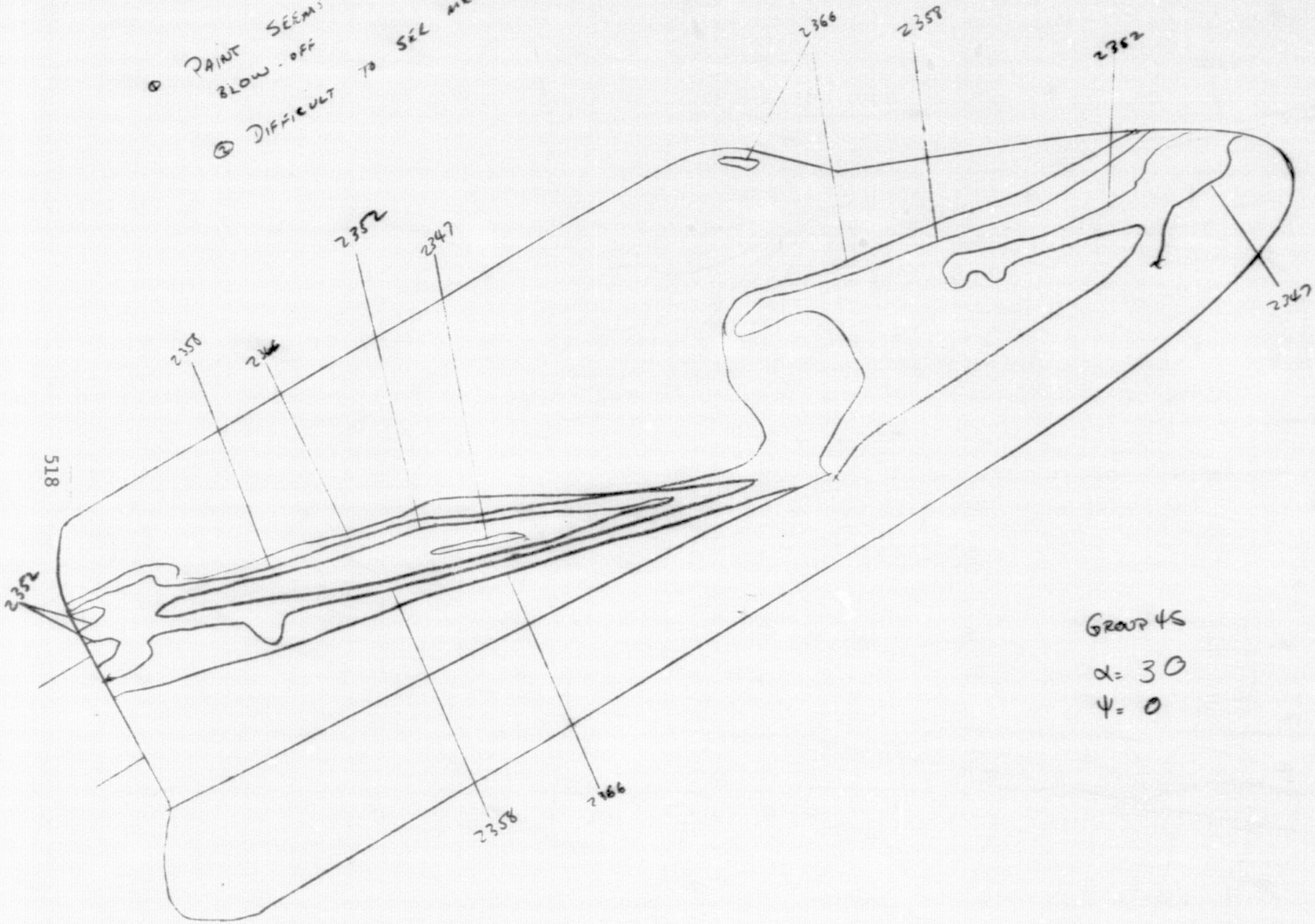
GROUP 45
$\alpha = 30$
$\psi = 0$

REPRODUCIBILITY OF THE

OH-58A

① PAINT SEEMS TO BLOW-OFF

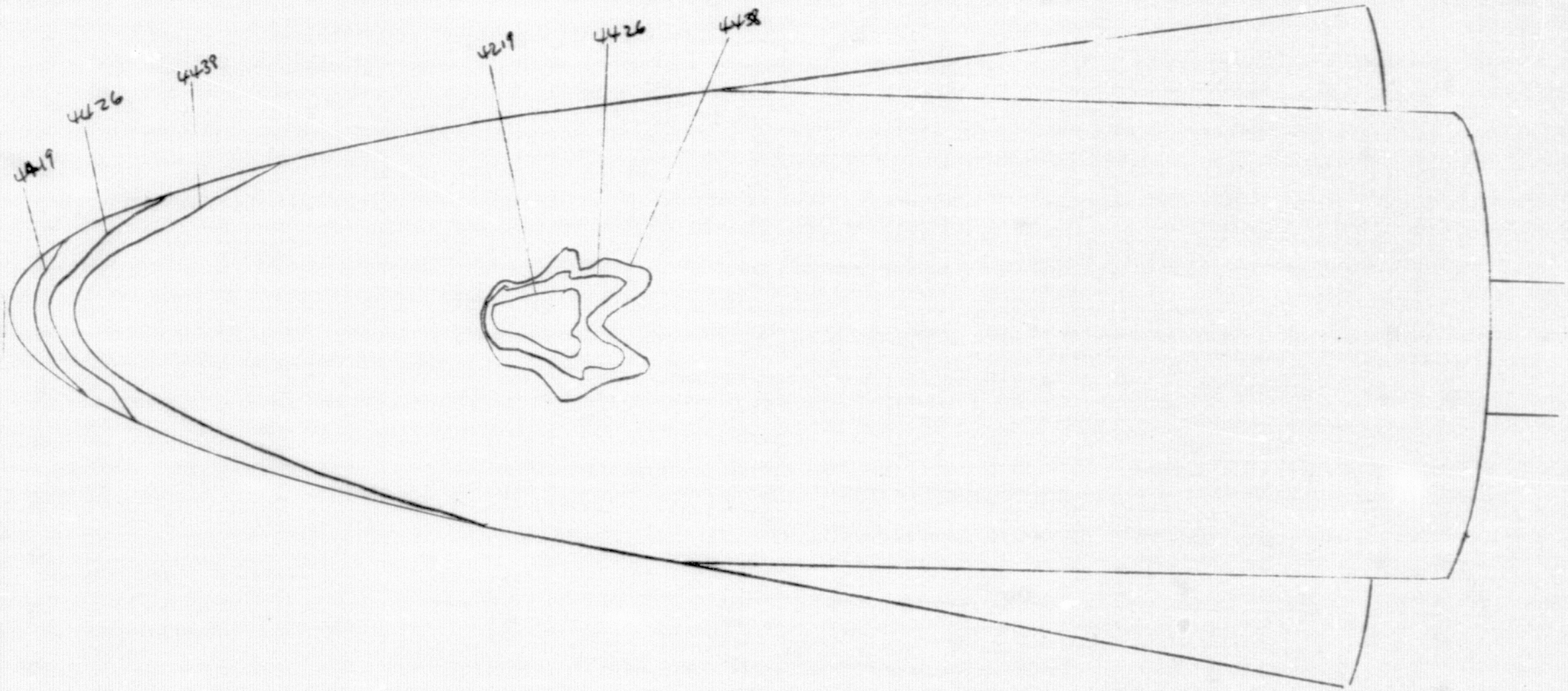
② DIFFICULT TO SEE MELT LINES



GROUP 45

$\alpha = 30$

$\psi = 0$



519

GROUP 46
$\alpha = 30$
$\phi = 0$

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4/10/74

NASA-RI OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA52E 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
45	0	7.97	321.0	1287	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	ML-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.034	1.498E	3785	3.913E-05	7.541E-09	1.507E 06	1.995E-02	2.195E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAM)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7499	125	80	.0493	0	0
OP SIDE(OS)	7738	125	80	.0493	0	0
BOTTOM(BOT)	8246	125	80	.0493	0	0
TOP(TOP)	8197	194	80	.0526	0	0

	PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO	7339(194)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS	7339(125)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO	8416(125)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO	8516(125)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO	7341(194)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS	7341(125)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO	8417(125)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO	8517(125)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME = 1.73										
TOP	7341(194)	2.18	1.18	7.461E-03	.3759	9.289E-03	.4680	1.059E-02	.5335	8.152E-03
OS	7341(125)	2.18	1.18	2.544E-03	.1282	3.107E-03	.1566	3.492E-03	.1759	2.790E-03
NOT	4418(125)	2.18	1.18	2.544E-03	.1282	3.107E-03	.1566	3.492E-03	.1759	2.790E-03
NOS	8518(125)	2.18	1.18	2.544E-03	.1282	3.107E-03	.1566	3.492E-03	.1759	2.790E-03
OS	7342(125)	3.26	2.26	1.440E-03	.0727	2.247E-03	.1132	2.525E-03	.1272	2.016E-03
TOP	7342(194)	3.28	2.28	5.366E-03	.2703	6.681E-03	.3366	7.615E-03	.3837	5.863E-03
NOT	4419(125)	3.28	2.28	1.629E-03	.0822	2.235E-03	.1126	2.511E-03	.1265	2.007E-03
NOS	8419(125)	3.28	2.28	1.629E-03	.0822	2.235E-03	.1126	2.511E-03	.1265	2.007E-03
TOP	7343(194)	4.36	3.36	4.423E-03	.2227	5.507E-03	.2773	6.277E-03	.3163	4.828E-03
OS	7343(125)	4.36	3.36	1.508E-03	.0759	1.842E-03	.0928	2.070E-03	.1042	1.652E-03
NOT	4420(125)	4.36	3.36	1.508E-03	.0759	1.842E-03	.0928	2.070E-03	.1042	1.652E-03
NOS	8520(125)	4.36	3.36	1.508E-03	.0759	1.842E-03	.0928	2.070E-03	.1042	1.652E-03
TOP	7344(194)	5.43	4.43	3.849E-03	.1939	4.792E-03	.2415	5.463E-03	.2753	4.207E-03
OS	7344(125)	5.43	4.43	1.312E-03	.0661	1.603E-03	.0808	1.801E-03	.0908	1.440E-03
NOT	4421(125)	5.43	4.43	1.312E-03	.0661	1.603E-03	.0808	1.801E-03	.0908	1.440E-03
NOS	8521(125)	5.43	4.43	1.312E-03	.0661	1.603E-03	.0808	1.801E-03	.0908	1.440E-03
NOT	4422(125)	6.51	5.51	1.177E-03	.0593	1.438E-03	.0724	1.616E-03	.0814	1.291E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA52E — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
45	0	7.97	321.1	1287	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (H= .04 FT)	STREF (H= .04 FT)
93.9	.034	1.449	3784	3.911E-05	7.560E-08	1.507E 06	1.985E-02	2.195E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOR SIDE(NCS)	7499	125	80	.0493	6.024E-02	5.6047E-02
OP SIDE(OS)	7738	125	80	.0493	6.024E-02	5.6047E-02
BOTTOM(BOT)	6246	125	80	.0493	6.024E-02	5.6047E-02
TOP(TOP)	8197	194	80	.0526	1.426E-01	1.5407E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7345(194)	6.53	5.53	3.445E-03	.1735	4.289E-03	.2160	4.869E-03	.2463	3.762E-03
OS 2345(125)	6.53	5.53	1.174E-03	.0592	1.435E-03	.0723	1.612E-03	.0812	1.287E-03
NOS 8922(125)	6.53	5.53	1.174E-03	.0592	1.435E-03	.0723	1.612E-03	.0812	1.287E-03
TOP 7346(194)	7.61	6.61	3.152E-03	.1588	3.924E-03	.1977	4.473E-03	.2254	3.443E-03
OS 2346(125)	7.61	6.61	1.075E-03	.0541	1.313E-03	.0661	1.475E-03	.0743	1.178E-03
HOT 4423(125)	7.61	6.61	1.075E-03	.0541	1.313E-03	.0661	1.475E-03	.0743	1.178E-03
NOS 8923(125)	7.61	6.61	1.075E-03	.0541	1.313E-03	.0661	1.475E-03	.0743	1.178E-03
TOP 7347(194)	8.69	7.69	2.423E-03	.1473	3.634E-03	.1834	4.148E-03	.2090	3.194E-03
OS 2347(125)	8.69	7.69	9.966E-04	.0502	1.217E-03	.0613	1.368E-03	.0689	1.093E-03
HOT 4424(125)	8.68	7.69	9.966E-04	.0502	1.217E-03	.0613	1.368E-03	.0689	1.093E-03
NOS 8924(125)	8.68	7.69	9.966E-04	.0502	1.217E-03	.0613	1.368E-03	.0689	1.093E-03
TOP 7348(194)	9.79	8.79	2.734E-03	.1378	3.404E-03	.1715	3.880E-03	.1955	2.988E-03
OS 2348(125)	9.79	8.79	9.321E-04	.0470	1.139E-03	.0574	1.279E-03	.0645	1.023E-03
HOT 4425(125)	9.79	8.79	9.321E-04	.0470	1.139E-03	.0574	1.279E-03	.0645	1.023E-03
NOS 8925(125)	9.79	8.79	9.321E-04	.0470	1.139E-03	.0574	1.279E-03	.0645	1.023E-03
TOP 7349(194)	10.86	9.86	2.580E-03	.1300	3.213E-03	.1618	3.662E-03	.1845	2.818E-03
OS 2349(125)	10.86	9.86	8.797E-04	.0443	1.075E-03	.0541	1.208E-03	.0608	9.646E-04
HOT 4426(125)	10.86	9.86	8.797E-04	.0443	1.075E-03	.0541	1.208E-03	.0608	9.646E-04
NOS 8926(125)	10.86	9.86	8.797E-04	.0443	1.075E-03	.0541	1.208E-03	.0608	9.646E-04
HOT 4427(125)	11.94	10.94	2.454E-04	.0421	1.020E-03	.0514	1.147E-03	.0578	9.156E-04
TOP 7350(194)	11.96	10.97	2.447E-03	.1233	3.047E-03	.1535	3.473E-03	.1749	2.672E-03
OS 2350(125)	11.96	10.97	8.344E-04	.0420	1.019E-03	.0513	1.145E-03	.0577	9.146E-04
NOS 8927(125)	11.96	10.97	8.344E-04	.0420	1.019E-03	.0513	1.145E-03	.0577	9.146E-04
TOP 7351(194)	13.04	12.04	2.335E-03	.1177	2.908E-03	.1465	3.314E-03	.1670	2.553E-03
OS 2351(125)	13.04	12.04	7.962E-04	.0401	9.726E-04	.0490	1.093E-03	.0551	8.736E-04
HOT 4428(125)	13.04	12.04	7.962E-04	.0401	9.726E-04	.0490	1.093E-03	.0551	8.736E-04
NOS 8928(125)	13.04	12.04	7.962E-04	.0401	9.726E-04	.0490	1.093E-03	.0551	8.736E-04

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4/10/74

NASA-RI 0H50 AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTION	ALPHA-PREBEND	ROLL-MODEL	YAW
45	0	7.97	320.9	1287	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.9	.034	1.458	3785	3.109E-05	7.551E-08	1.506E 06	1.984E-02	2.196E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXXK)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	125	80	.0493	6.024E-02	5.6047E-02
OP SIDE(OS)	7738	125	80	.0493	6.024E-02	5.6047E-02
BOTTOM(BOT)	8246	125	80	.0493	6.024E-02	5.6047E-02
TOP(TOP)	8197	194	80	.0526	1.526E-01	1.5407E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7352(194)	14.12	13.12	2.237E-03	.1127	2.786E-03	.1403	3.176E-03	.1599	2.443E-03
OS 2352(125)	14.12	13.12	7.029E-04	.0354	9.319E-04	.0469	1.047E-03	.0527	8.362E-04
HOT 4429(125)	14.12	13.12	7.029E-04	.0354	9.319E-04	.0469	1.047E-03	.0527	8.362E-04
NOS 8929(125)	14.12	13.12	7.029E-04	.0354	9.319E-04	.0469	1.047E-03	.0527	8.362E-04
TOP 7353(194)	15.22	14.22	2.149E-03	.1082	2.676E-03	.1348	3.050E-03	.1536	2.347E-03
OS 2353(125)	15.22	14.22	7.327E-04	.0369	8.951E-04	.0451	1.006E-03	.0507	8.032E-04
HOT 4430(125)	15.22	14.22	7.327E-04	.0369	8.951E-04	.0451	1.006E-03	.0507	8.032E-04
NOS 8930(125)	15.22	14.22	7.327E-04	.0369	8.951E-04	.0451	1.006E-03	.0507	8.032E-04
TOP 7354(194)	16.29	15.30	2.072E-03	.1044	2.580E-03	.1300	2.941E-03	.1482	2.263E-03
OS 2354(125)	16.29	15.30	7.065E-04	.0356	8.630E-04	.0435	9.698E-04	.0489	7.746E-04
HOT 4431(125)	16.29	15.30	7.065E-04	.0356	8.630E-04	.0435	9.698E-04	.0489	7.746E-04
NOS 8931(125)	16.29	15.30	7.065E-04	.0356	8.630E-04	.0435	9.698E-04	.0489	7.746E-04
HOT 4432(125)	17.37	16.37	6.829E-04	.0344	8.342E-04	.0420	9.374E-04	.0472	7.495E-04
TOP 7355(194)	17.40	16.40	2.001E-03	.1009	2.492E-03	.1256	2.840E-03	.1432	2.188E-03
OS 2355(125)	17.40	16.40	6.824E-04	.0344	8.335E-04	.0420	9.366E-04	.0472	7.489E-04
NOS 8932(125)	17.40	16.40	6.824E-04	.0344	8.335E-04	.0420	9.366E-04	.0472	7.489E-04
TOP 7356(194)	18.47	17.47	1.939E-03	.0977	2.414E-03	.1216	2.752E-03	.1387	2.119E-03
OS 2356(125)	18.47	17.47	6.610E-04	.0333	8.075E-04	.0407	9.073E-04	.0457	7.252E-04
HOT 4433(125)	18.47	17.47	6.610E-04	.0333	8.075E-04	.0407	9.073E-04	.0457	7.252E-04
NOS 8933(125)	18.47	17.47	6.610E-04	.0333	8.075E-04	.0407	9.073E-04	.0457	7.252E-04
TOP 7357(194)	19.55	18.55	1.882E-03	.0948	2.343E-03	.1181	2.671E-03	.1346	2.057E-03
OS 2357(125)	19.55	18.55	6.416E-04	.0323	7.837E-04	.0395	8.806E-04	.0444	7.038E-04
HOT 4434(125)	19.55	18.55	6.416E-04	.0323	7.837E-04	.0395	8.806E-04	.0444	7.038E-04
NOS 8934(125)	19.55	18.55	6.416E-04	.0323	7.837E-04	.0395	8.806E-04	.0444	7.038E-04
TOP 7358(194)	20.65	19.65	1.828E-03	.0921	2.276E-03	.1147	2.595E-03	.1307	1.997E-03
OS 2358(125)	20.65	19.65	6.233E-04	.0314	7.614E-04	.0384	8.556E-04	.0431	6.834E-04
HOT 4435(125)	20.65	19.65	6.233E-04	.0314	7.614E-04	.0384	8.556E-04	.0431	6.834E-04
NOS 8935(125)	20.65	19.65	6.233E-04	.0314	7.614E-04	.0384	8.556E-04	.0431	6.834E-04

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NASA-RT OMS0

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
45	0	7.97	321.1	1287	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (R= .04 FT)	SIREF (R= .04 FT)
93.9	.034	1.445	3764	3.011E-05	7.500E-08	1.507E 06	1.985E-02	2.195E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAR)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7499	125	80	.0493	6.024E-02	5.6047E-02
UP SIDE(US)	7738	125	80	.0493	6.024E-02	5.6047E-02
BOTTOM(BOT)	8246	125	80	.0493	6.024E-02	5.6047E-02
TOP(TOP)	8197	194	80	.0526	1.526E-01	1.5407E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7359(194)	21.72	20.73	1.760E-03	.0887	2.216E-03	.1117	2.526E-03	.1273	1.946E-03
OS 2359(125)	21.72	20.73	6.698E-04	.0306	7.414E-04	.0374	8.331E-04	.0420	6.659E-04
BOT 4436(125)	21.72	20.73	6.698E-04	.0306	7.414E-04	.0374	8.331E-04	.0420	6.659E-04
NOS 8936(125)	21.72	20.73	6.698E-04	.0306	7.414E-04	.0374	8.331E-04	.0420	6.659E-04
BOT 4437(125)	22.83	21.83	5.419E-04	.0298	7.228E-04	.0364	8.123E-04	.0409	6.496E-04
TOP 7360(194)	22.83	21.83	1.735E-03	.0874	2.140E-03	.1089	2.482E-03	.1241	1.898E-03
OS 2360(125)	22.83	21.83	5.414E-04	.0298	7.224E-04	.0364	8.118E-04	.0409	6.494E-04
NOS 8937(125)	22.83	21.83	5.414E-04	.0298	7.224E-04	.0364	8.118E-04	.0409	6.494E-04
TOP 7361(194)	23.90	22.90	1.698E-03	.0853	2.108E-03	.1062	2.403E-03	.1211	1.850E-03
OS 2361(125)	23.90	22.90	5.773E-04	.0291	7.053E-04	.0355	7.925E-04	.0399	6.330E-04
BOT 4438(125)	23.90	22.90	5.773E-04	.0291	7.053E-04	.0355	7.925E-04	.0399	6.330E-04
NOS 8938(125)	23.90	22.90	5.773E-04	.0291	7.053E-04	.0355	7.925E-04	.0399	6.330E-04
TOP 7362(194)	24.98	23.98	1.655E-03	.0836	2.060E-03	.1039	2.349E-03	.1184	1.810E-03
OS 2362(125)	24.98	23.98	5.542E-04	.0284	6.892E-04	.0347	7.745E-04	.0390	6.194E-04
BOT 4439(125)	24.98	23.98	5.542E-04	.0284	6.892E-04	.0347	7.745E-04	.0390	6.194E-04
NOS 8939(125)	24.98	23.98	5.542E-04	.0284	6.892E-04	.0347	7.745E-04	.0390	6.194E-04
TOP 7363(194)	26.08	25.08	1.618E-03	.0816	2.015E-03	.1016	2.297E-03	.1158	1.771E-03
OS 2363(125)	26.08	25.08	5.517E-04	.0278	6.739E-04	.0340	7.573E-04	.0382	6.060E-04
BOT 4440(125)	26.08	25.08	5.517E-04	.0278	6.739E-04	.0340	7.573E-04	.0382	6.060E-04
NOS 8940(125)	26.08	25.08	5.517E-04	.0278	6.739E-04	.0340	7.573E-04	.0382	6.060E-04
TOP 7364(194)	27.16	26.16	1.594E-03	.0798	1.973E-03	.0994	2.249E-03	.1133	1.731E-03
OS 2364(125)	27.16	26.16	5.403E-04	.0272	6.599E-04	.0333	7.416E-04	.0374	5.925E-04
BOT 4441(125)	27.16	26.16	5.403E-04	.0272	6.599E-04	.0333	7.416E-04	.0374	5.925E-04
NOS 8941(125)	27.16	26.16	5.403E-04	.0272	6.599E-04	.0333	7.416E-04	.0374	5.925E-04
TOP 7365(194)	28.23	27.23	1.553E-03	.0783	1.933E-03	.0975	2.204E-03	.1111	1.698E-03
OS 2365(125)	28.23	27.23	5.295E-04	.0267	6.468E-04	.0326	7.268E-04	.0366	5.812E-04
BOT 4442(125)	28.23	27.23	5.295E-04	.0267	6.468E-04	.0326	7.268E-04	.0366	5.812E-04
NOS 8942(125)	28.23	27.23	5.295E-04	.0267	6.468E-04	.0326	7.268E-04	.0366	5.812E-04

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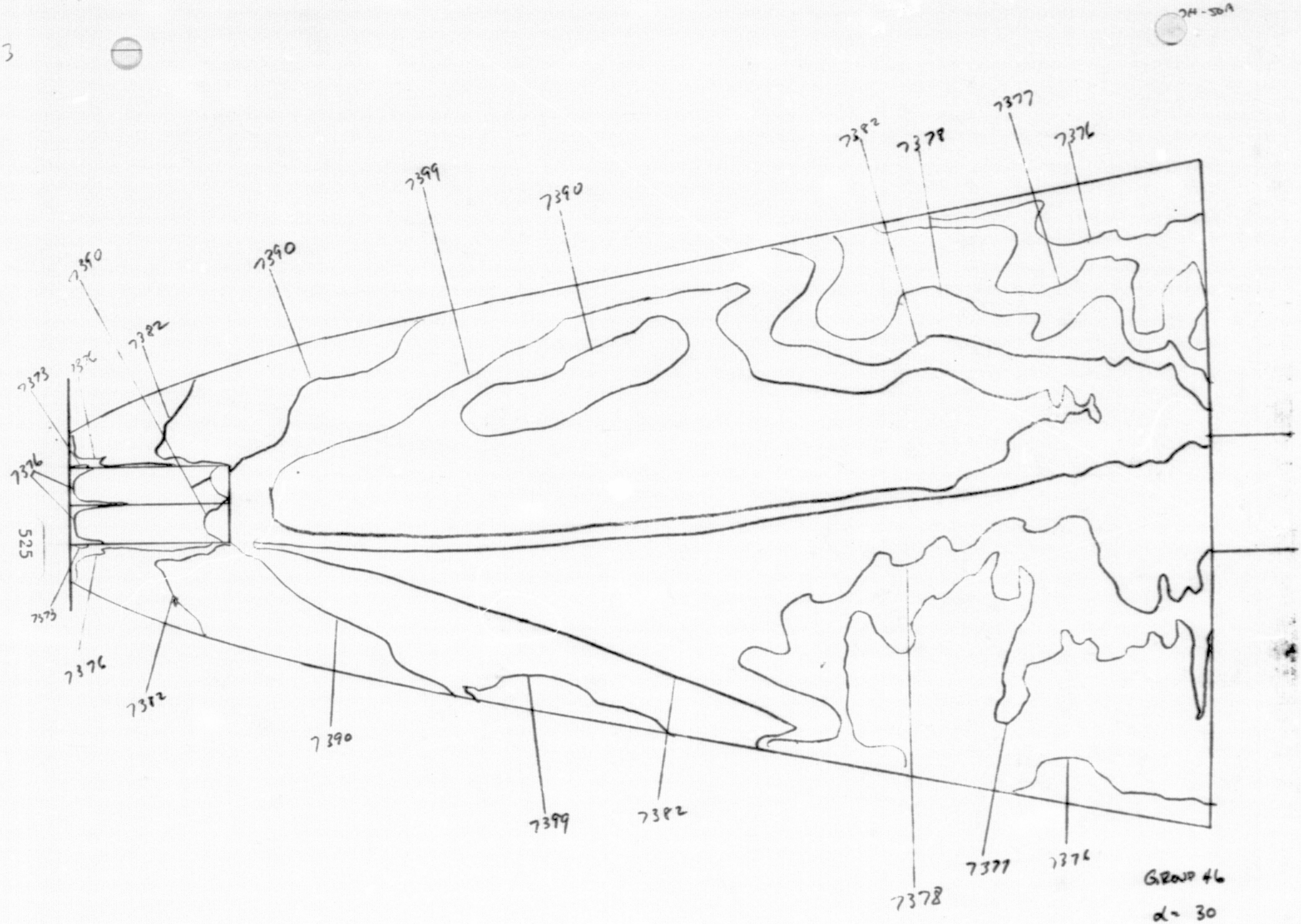
NASA-PI OHEC — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
45	0	7.97	320.7	1287	20.93	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.9	.036	1.447	3784	3.007E-05	7.598E-08	1.595E 06	1.996E-02	2.196E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAR)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7499	125	80	.0493	6.024E-02	5.6047E-02
OP SIDE(OS)	7738	125	80	.0493	6.024E-02	5.6047E-02
BOTTOM(BOT)	8246	125	80	.0493	6.024E-02	5.6047E-02
TOP(TOP)	8197	194	80	.0526	1.526E-01	1.5407E-01

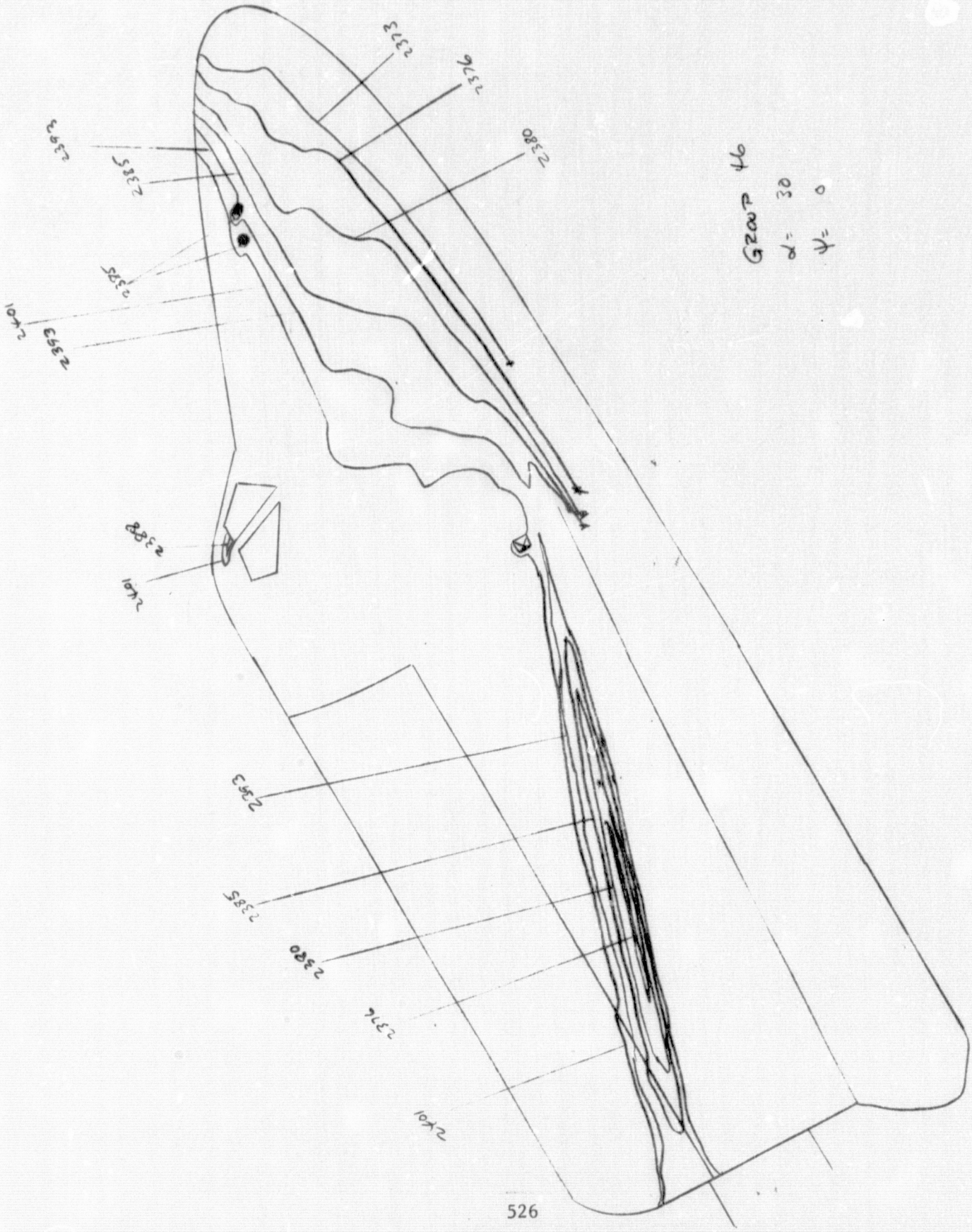
PIC NO	TIME	DELTIME	P(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7366(194)	29.33	28.34	1.522E-03	.0747	1.896E-03	.0955	2.161E-03	.1089	1.664E-03
OS 2366(125)	29.33	28.34	5.191E-04	.0262	6.341E-04	.0320	7.125E-04	.0359	5.696E-04
BOT 4443(125)	29.33	28.34	5.191E-04	.0262	6.341E-04	.0320	7.125E-04	.0359	5.696E-04
NOS 8943(125)	29.33	28.34	5.191E-04	.0262	6.341E-04	.0320	7.125E-04	.0359	5.696E-04
TOP 7367(194)	30.41	29.41	1.494E-03	.0753	1.861E-03	.0938	2.121E-03	.1069	1.634E-03
OS 2367(125)	30.41	29.41	5.095E-04	.0257	6.224E-04	.0314	6.993E-04	.0352	5.591E-04
BOT 4444(125)	30.41	29.41	5.095E-04	.0257	6.224E-04	.0314	6.993E-04	.0352	5.591E-04
NOS 8944(125)	30.41	29.41	5.095E-04	.0257	6.224E-04	.0314	6.993E-04	.0352	5.591E-04
	31.19		MODEL WAS LEFT CENTERLINE						
TOP 7368(194)	31.49	30.49	1.468E-03	.0740	1.827E-03	.0921	2.083E-03	.1050	1.606E-03
OS 2368(125)	31.49	30.49	5.004E-04	.0252	6.113E-04	.0308	6.869E-04	.0346	5.495E-04
BOT 4445(125)	31.49	30.49	5.004E-04	.0252	6.113E-04	.0308	6.869E-04	.0346	5.495E-04
NOS 8945(125)	31.51	30.51	5.002E-04	.0252	6.110E-04	.0308	6.866E-04	.0346	5.493E-04
TOP 7369(194)	32.59	31.59	1.442E-03	.0727	1.795E-03	.0905	2.046E-03	.1031	1.576E-03
OS 2369(125)	32.59	31.59	4.916E-04	.0248	6.005E-04	.0303	6.748E-04	.0340	5.393E-04
BOT 4446(125)	32.59	31.59	4.916E-04	.0248	6.005E-04	.0303	6.748E-04	.0340	5.393E-04
NOS 8946(125)	32.59	31.59	4.916E-04	.0248	6.005E-04	.0303	6.748E-04	.0340	5.393E-04



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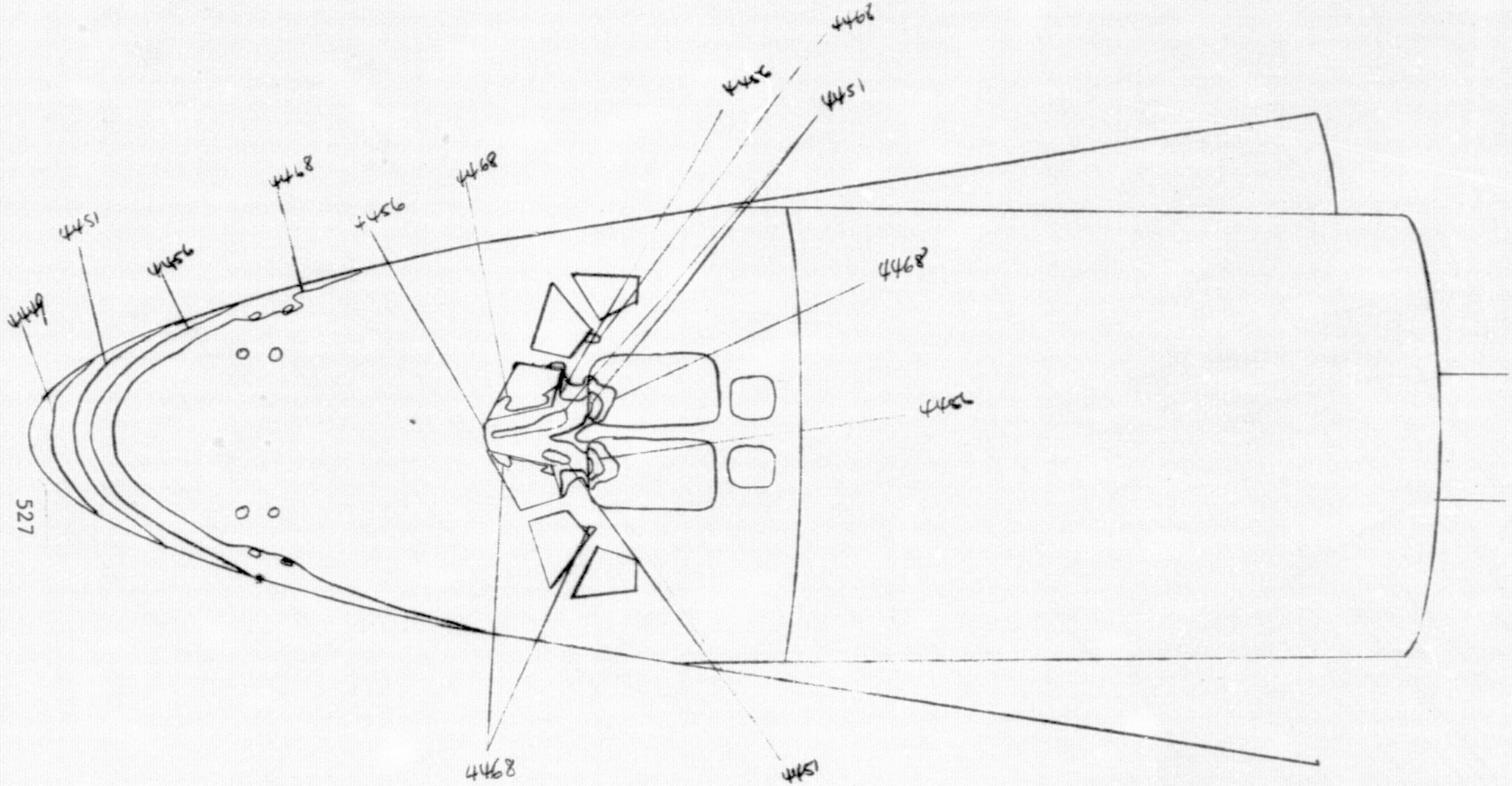
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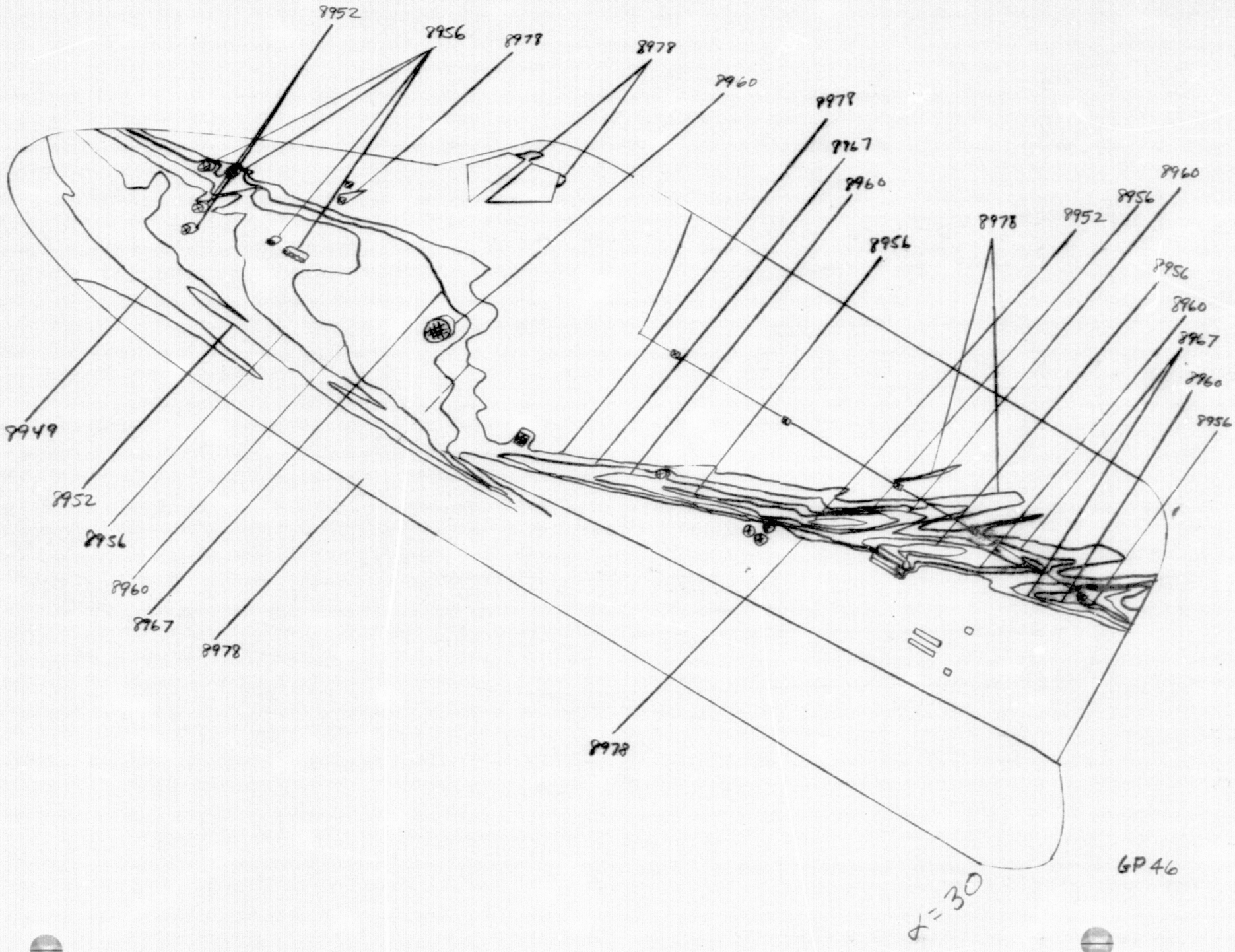
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NASA-RI OHED

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA524

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREREND	ROLL-MODEL	YAW
46	9	7.97	321.2	1273	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	MREF (R= .96 FT)	SREF (R= .06 FT)
92.5	.034	1.495	3784	3.045E-05	7.478E-08	1.533E 06	1.992E-02	2.188E-02

CAMERA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAR)	TPAR(TO)	BETA(TO)
NOF SIDE(NOS)	7499	131	83	.0497	0	0
UP SIDE(OS)	7738	131	83	.0497	0	0
BOTTOM(BOT)	8246	131	83	.0497	0	0
TOP(TOP)	8197	259	83	.0551	0	0

PIC NO	TIME DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TO 7370(250)	.03	MODEL HAS NOT REACHED CENTERLINE						
OS 2370(131)	.03	MODEL HAS NOT REACHED CENTERLINE						
NO 4447(131)	.03	MODEL HAS NOT REACHED CENTERLINE						
NO 8547(131)	.03	MODEL HAS NOT REACHED CENTERLINE						
TO 7371(250)	1.10	MODEL HAS NOT REACHED CENTERLINE						
OS 2371(131)	1.10	MODEL HAS NOT REACHED CENTERLINE						
NO 4448(131)	1.10	MODEL HAS NOT REACHED CENTERLINE						
NO 8548(131)	1.10							
INJECT TIME =	1.78							
TOP 7372(250)	2.18	1.18	1.262E-02	.6371	1.604E-02	.8123	1.867E-02	.9422	1.368E-02
OS 2372(131)	2.18	1.18	2.713E-03	.1420	3.447E-03	.1740	3.457E-03	.1962	3.069E-03
HOT 4449(131)	2.18	1.18	2.713E-03	.1420	3.447E-03	.1740	3.457E-03	.1962	3.069E-03
NOS 8549(131)	2.18	1.18	2.713E-03	.1420	3.447E-03	.1740	3.457E-03	.1962	3.069E-03
TOP 7373(250)	3.25	2.26	9.125E-03	.4608	1.164E-02	.5875	1.380E-02	.6815	9.896E-03
OS 2373(131)	3.25	2.26	2.434E-03	.1027	2.493E-03	.1258	2.811E-03	.1419	2.220E-03
HOT 4450(131)	3.25	2.26	2.434E-03	.1027	2.493E-03	.1258	2.811E-03	.1419	2.220E-03
NOS 8550(131)	3.25	2.26	2.434E-03	.1027	2.493E-03	.1258	2.811E-03	.1419	2.220E-03
TOP 7374(250)	4.33	3.33	7.510E-03	.3793	9.576E-03	.4836	1.111E-02	.5609	8.148E-03
OS 2374(131)	4.33	3.33	1.674E-03	.0845	2.051E-03	.1036	2.313E-03	.1168	1.829E-03
HOT 4451(131)	4.33	3.33	1.668E-03	.0842	2.043E-03	.1032	2.304E-03	.1163	1.821E-03
NOS 8551(131)	4.33	3.33	1.668E-03	.0842	2.043E-03	.1032	2.304E-03	.1163	1.821E-03
TOP 7375(250)	5.43	4.43	6.511E-03	.3288	8.302E-03	.4193	9.630E-03	.4864	7.066E-03
OS 2375(131)	5.43	4.43	1.451E-03	.0733	1.770E-03	.0898	2.005E-03	.1013	1.585E-03
HOT 4452(131)	5.43	4.43	1.451E-03	.0733	1.770E-03	.0898	2.005E-03	.1013	1.585E-03
NOS 8552(131)	5.43	4.43	1.451E-03	.0733	1.770E-03	.0898	2.005E-03	.1013	1.585E-03
TOP 7376(250)	6.51	5.51	5.415E-03	.2949	7.447E-03	.3760	8.639E-03	.4362	6.335E-03
OS 2376(131)	6.51	5.51	1.302E-03	.0657	1.595E-03	.0805	1.799E-03	.0908	1.421E-03
HOT 4453(131)	6.51	5.51	1.302E-03	.0657	1.595E-03	.0805	1.799E-03	.0908	1.421E-03
NOS 8553(131)	6.51	5.51	1.302E-03	.0657	1.595E-03	.0805	1.799E-03	.0908	1.421E-03

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NASA-RI OH50

AEDC(AEO-IAC.) ARNOLD AFS. TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA52E

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
46	A	7.97	320.9	1273	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	PE/FT (FT-1)	HREF (R= .04 FT)	STHEF (R= .04 FT)
92.0	.034	1.455	3704	3.042E-05	7.47DF-08	1.531E 05	1.981E-02	2.181F-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RNDXCRR)	TRAN(TO)	BETA(TO)
NOR SIDE(NOS)	7499	131	83	.0497	6.576E-02	6.1483E-02
UP SIDE(OS)	7738	131	83	.0497	6.576E-02	6.1483E-02
BOTTOM(BOT)	8246	131	83	.0497	6.576E-02	6.1483E-02
TOP(TOP)	8197	250	83	.0551	2.288E-01	2.4882E-01

PIC NO	TIME	DELTIME	M(TO)	M(TO)/MREF	M(.9TO)	M(.9TO)/MREF	M(.912TO)	M(.912TO)/MREF	ST(TO)
TOP 7377(250)	7.61	6.61	5.332E-03	.3693	6.799E-03	.3434	7.886E-03	.3984	5.788E-03
OS 2377(131)	7.61	6.61	1.188E-03	.0600	1.456E-03	.0736	1.642E-03	.0829	1.298E-03
BOT 4454(131)	7.61	6.61	1.188E-03	.0600	1.456E-03	.0736	1.642E-03	.0829	1.298E-03
NOS 8954(131)	7.61	6.61	1.188E-03	.0600	1.456E-03	.0736	1.642E-03	.0829	1.298E-03
TOP 7378(250)	8.69	7.69	4.445E-03	.2497	6.305E-03	.3184	7.314E-03	.3694	5.366E-03
OS 2378(131)	8.68	7.69	1.102E-03	.0557	1.350E-03	.0682	1.523E-03	.0769	1.204E-03
BOT 4455(131)	8.65	7.69	1.102E-03	.0557	1.350E-03	.0682	1.523E-03	.0769	1.204E-03
NOS 8955(131)	8.71	7.71	1.100E-03	.0556	1.348E-03	.0681	1.520E-03	.0768	1.201E-03
TOP 7379(250)	9.79	8.79	4.825E-03	.2336	5.897E-03	.2979	6.840E-03	.3456	5.022E-03
OS 2379(131)	9.79	8.79	1.031E-03	.0521	1.263E-03	.0638	1.424E-03	.0719	1.126E-03
BOT 4456(131)	9.79	8.79	1.031E-03	.0521	1.263E-03	.0638	1.424E-03	.0719	1.126E-03
NOS 8956(131)	9.79	8.79	1.031E-03	.0521	1.263E-03	.0638	1.424E-03	.0719	1.126E-03
TOP 7380(250)	10.86	9.86	4.355E-03	.2205	5.566E-03	.2812	6.456E-03	.3262	4.740E-03
BOT 4457(131)	10.86	9.86	9.729E-04	.0492	1.192E-03	.0602	1.344E-03	.0679	1.063E-03
NOS 8957(131)	10.86	9.86	9.729E-04	.0492	1.192E-03	.0602	1.344E-03	.0679	1.063E-03
OS 2380(131)	10.89	9.89	9.717E-04	.0491	1.191E-03	.0602	1.342E-03	.0678	1.062E-03
TOP 7381(250)	11.96	10.97	4.140E-03	.2091	5.279E-03	.2666	6.123E-03	.3093	4.493E-03
OS 2381(131)	11.96	10.97	9.228E-04	.0466	1.131E-03	.0571	1.275E-03	.0644	1.008E-03
BOT 4458(131)	11.96	10.97	9.228E-04	.0466	1.131E-03	.0571	1.275E-03	.0644	1.008E-03
NOS 8958(131)	11.96	10.97	9.228E-04	.0466	1.131E-03	.0571	1.275E-03	.0644	1.008E-03
TOP 7382(250)	13.04	12.04	3.491E-03	.1905	5.037E-03	.2544	5.843E-03	.2951	4.287E-03
BOT 4459(131)	13.04	12.04	8.804E-04	.0445	1.079E-03	.0545	1.217E-03	.0614	9.618E-04
NOS 8959(131)	13.04	12.04	8.804E-04	.0445	1.079E-03	.0545	1.217E-03	.0614	9.618E-04
OS 2382(131)	13.07	12.07	8.796E-04	.0444	1.078E-03	.0544	1.215E-03	.0614	9.608E-04
TOP 7383(250)	14.14	13.14	3.782E-03	.1910	4.822E-03	.2436	5.543E-03	.2825	4.105E-03
OS 2383(131)	14.14	13.14	8.429E-04	.0426	1.033E-03	.0522	1.184E-03	.0598	9.209E-04
BOT 4460(131)	14.14	13.14	8.429E-04	.0426	1.033E-03	.0522	1.184E-03	.0598	9.209E-04
NOS 8960(131)	14.14	13.14	8.429E-04	.0426	1.033E-03	.0522	1.184E-03	.0598	9.209E-04

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NASA-RI ONEO — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE

VON KARMAN GAS DYNAMICS FACILITY

VA52E — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREHEND	ROLL-MODEL	YAW
46	0	7.97	320.6	1273	20.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (RE .04 FT)	STREF (RE .04 FT)
92.9	.034	1.496	3764	3.940E-05	7.477E-08	1.530E 04	1.980E-02	2.182E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAR)	TRAR(TO)	RETA(TO)
NOF SIDE(NOS)	7499	131	83	.0497	6.576E-02	6.1483E-02
OP SIDE(OS)	7738	131	83	.0497	6.576E-02	6.1483E-02
BOTTOM(BOT)	8246	131	83	.0497	6.576E-02	6.1483E-02
TOP(TOP)	8197	250	83	.0551	2.288E-01	2.4882E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
OS 7384(131)	15.22	14.22	8.103E-04	.0409	9.926E-04	.0502	1.120E-03	.0566	8.859E-04
BOT 4461(131)	15.22	14.22	8.103E-04	.0409	9.926E-04	.0502	1.120E-03	.0566	8.859E-04
TOP 7384(250)	15.24	14.24	3.033E-03	.1535	4.632E-03	.2340	5.373E-03	.2714	3.944E-03
NOS 8961(131)	15.24	14.24	8.094E-04	.0409	9.920E-04	.0501	1.119E-03	.0565	8.848E-04
TOP 7385(250)	16.32	15.32	3.503E-03	.1770	4.660E-03	.2357	5.180E-03	.2618	3.807E-03
OS 2385(131)	16.32	15.32	7.807E-04	.0395	9.565E-04	.0483	1.079E-03	.0545	8.540E-04
BOT 4462(131)	16.32	15.32	7.807E-04	.0395	9.565E-04	.0483	1.079E-03	.0545	8.540E-04
NOS 8962(131)	16.32	15.32	7.807E-04	.0395	9.565E-04	.0483	1.079E-03	.0545	8.540E-04
TOP 7386(250)	17.40	16.40	3.386E-03	.1711	4.317E-03	.2181	5.008E-03	.2530	3.676E-03
OS 2386(131)	17.40	16.40	7.546E-04	.0381	9.246E-04	.0467	1.043E-03	.0527	8.247E-04
BOT 4463(131)	17.40	16.40	7.546E-04	.0381	9.246E-04	.0467	1.043E-03	.0527	8.247E-04
NOS 8963(131)	17.40	16.40	7.546E-04	.0381	9.246E-04	.0467	1.043E-03	.0527	8.247E-04
TOP 7387(250)	18.50	17.50	3.277E-03	.1656	4.179E-03	.2111	4.847E-03	.2449	3.559E-03
OS 2387(131)	18.50	17.50	7.305E-04	.0369	8.950E-04	.0452	1.009E-03	.0510	7.983E-04
BOT 4464(131)	18.50	17.50	7.305E-04	.0369	8.950E-04	.0452	1.009E-03	.0510	7.983E-04
NOS 8964(131)	18.50	17.50	7.305E-04	.0369	8.950E-04	.0452	1.009E-03	.0510	7.983E-04
TOP 7388(250)	19.57	18.57	3.181E-03	.1608	4.056E-03	.2050	4.705E-03	.2378	3.456E-03
OS 2388(131)	19.57	18.57	7.090E-04	.0358	8.687E-04	.0439	9.795E-04	.0495	7.753E-04
BOT 4465(131)	19.57	18.57	7.090E-04	.0358	8.687E-04	.0439	9.795E-04	.0495	7.753E-04
NOS 8965(131)	19.57	18.57	7.090E-04	.0358	8.687E-04	.0439	9.795E-04	.0495	7.753E-04
TOP 7389(250)	20.67	19.68	3.091E-03	.1562	3.941E-03	.1992	4.571E-03	.2310	3.358E-03
OS 2389(131)	20.67	19.68	6.889E-04	.0348	8.440E-04	.0427	9.517E-04	.0481	7.533E-04
BOT 4466(131)	20.67	19.68	6.889E-04	.0348	8.440E-04	.0427	9.517E-04	.0481	7.533E-04
NOS 8966(131)	20.67	19.68	6.889E-04	.0348	8.440E-04	.0427	9.517E-04	.0481	7.533E-04
TOP 7390(250)	21.75	20.75	3.010E-03	.1521	3.837E-03	.1940	4.451E-03	.2250	3.272E-03
OS 2390(131)	21.75	20.75	6.708E-04	.0339	8.219E-04	.0415	9.267E-04	.0469	7.339E-04
BOT 4467(131)	21.75	20.75	6.708E-04	.0339	8.219E-04	.0415	9.267E-04	.0469	7.339E-04
NOS 8967(131)	21.75	20.75	6.708E-04	.0339	8.219E-04	.0415	9.267E-04	.0469	7.339E-04

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NASA-RI OH60

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
46	0	7.97	320.1	1272	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (R= .04 FT)	STREF (R= .04 FT)
92.9	.034	1.444	3763	3.038E-05	7.474E-08	1.52RE 06	1.978E-02	2.184E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAK)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	131	83	.0497	6.576E-02	6.1483E-02
OP SIDE(OS)	7738	131	83	.0497	6.576E-02	6.1483E-02
HOTTOM(BOT)	8246	131	83	.0497	6.576E-02	6.1483E-02
TOP(TOP)	8197	250	83	.0551	2.298E-01	2.4882E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7391(250)	22.85	21.85	2.693E-03	.1483	3.739E-03	.1891	4.338E-03	.2194	3.190E-03
OS 2391(131)	22.85	21.85	6.537E-04	.0331	8.009E-04	.0405	9.031E-04	.0457	7.156E-04
HOT 4469(131)	22.85	21.85	6.537E-04	.0331	8.009E-04	.0405	9.031E-04	.0457	7.156E-04
NOS 8968(131)	22.85	21.85	6.537E-04	.0331	8.009E-04	.0405	9.031E-04	.0457	7.156E-04
TOP 7392(250)	23.93	22.93	2.663E-03	.1468	3.651E-03	.1846	4.235E-03	.2141	3.114E-03
OS 2392(131)	23.93	22.93	6.381E-04	.0323	7.819E-04	.0395	8.816E-04	.0446	6.984E-04
HOT 4469(131)	23.93	22.93	6.381E-04	.0323	7.819E-04	.0395	8.816E-04	.0446	6.984E-04
NOS 8969(131)	23.93	22.93	6.381E-04	.0323	7.819E-04	.0395	8.816E-04	.0446	6.984E-04
HOT 4470(131)	25.00	24.01	6.237E-04	.0315	7.641E-04	.0386	8.616E-04	.0436	6.821E-04
TOP 7393(250)	25.03	24.03	2.797E-03	.1414	3.560E-03	.1803	4.136E-03	.2091	3.040E-03
OS 2393(131)	25.03	24.03	6.237E-04	.0315	7.637E-04	.0386	8.612E-04	.0435	6.820E-04
NOS 8970(131)	25.03	24.03	6.237E-04	.0315	7.637E-04	.0386	8.612E-04	.0435	6.820E-04
TOP 7394(250)	26.11	25.11	2.736E-03	.1383	3.489E-03	.1764	4.047E-03	.2046	2.975E-03
OS 2394(131)	26.11	25.11	6.098E-04	.0308	7.472E-04	.0378	8.425E-04	.0426	6.672E-04
HOT 4471(131)	26.11	25.11	6.098E-04	.0308	7.472E-04	.0378	8.425E-04	.0426	6.672E-04
NOS 8971(131)	26.11	25.11	6.098E-04	.0308	7.472E-04	.0378	8.425E-04	.0426	6.672E-04
HOT 4472(131)	27.18	26.18	5.972E-04	.0302	7.317E-04	.0370	8.250E-04	.0417	6.536E-04
TOP 7395(250)	27.21	26.21	2.678E-03	.1354	3.415E-03	.1727	3.961E-03	.2003	2.913E-03
OS 2395(131)	27.21	26.21	5.969E-04	.0302	7.313E-04	.0370	8.246E-04	.0417	6.535E-04
NOS 8972(131)	27.21	26.21	5.969E-04	.0302	7.313E-04	.0370	8.246E-04	.0417	6.535E-04
TOP 7396(250)	28.28	27.28	2.625E-03	.1327	3.347E-03	.1692	3.882E-03	.1963	2.855E-03
OS 2396(131)	28.28	27.28	5.850E-04	.0296	7.167E-04	.0362	8.082E-04	.0409	6.404E-04
HOT 4473(131)	28.28	27.28	5.850E-04	.0296	7.167E-04	.0362	8.082E-04	.0409	6.404E-04
NOS 8973(131)	28.28	27.28	5.850E-04	.0296	7.167E-04	.0362	8.082E-04	.0409	6.404E-04
HOT 4474(131)	29.36	28.36	5.738E-04	.0290	7.030E-04	.0355	7.927E-04	.0401	6.280E-04

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREHEND	ROLL-MODEL	YAW
46	0	7.97	320.0	1272	29.98	.02	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (R= .04 FT)	SREF (R= .04 FT)
92.5	.034	1.443	3703	3.035E-05	7.478E-08	1.528E 06	1.978E-02	2.184F-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOAC**)	TB&R(TO)	BETA(TO)
NOR SIDE(NOS)	7499	131	83	.0497	6.576E-02	6.1483E-02
UP SIDE(US)	7738	131	83	.0497	6.576E-02	6.1483E-02
HOTTOM(BOT)	8246	131	83	.0497	6.576E-02	6.1483E-02
TOP(TOP)	8197	250	83	.0551	2.288E-01	2.4882E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7397(250)	29.38	28.39	2.573E-03	.1301	3.281E-03	.1659	3.806E-03	.1925	2.799E-03
US 2397(131)	29.38	28.39	5.735E-04	.0290	7.027E-04	.0355	7.924E-04	.0401	6.279E-04
NOS 8974(131)	29.38	28.39	5.735E-04	.0290	7.027E-04	.0355	7.924E-04	.0401	6.279E-04
TOP 7398(250)	30.46	29.46	2.526E-03	.1277	3.221E-03	.1629	3.736E-03	.1889	2.748E-03
US 2398(131)	30.46	29.46	5.730E-04	.0285	6.898E-04	.0349	7.778E-04	.0393	6.163E-04
HOT 4475(131)	30.46	29.46	5.730E-04	.0285	6.898E-04	.0349	7.778E-04	.0393	6.163E-04
NOS 8975(131)	30.46	29.46	5.730E-04	.0285	6.898E-04	.0349	7.778E-04	.0393	6.163E-04
HOT 4476(131)	31.56	30.56	5.530E-04	.0280	6.775E-04	.0343	7.639E-04	.0387	6.060E-04
TOP 7399(250)	31.56	30.56	2.482E-03	.1254	3.162E-03	.1600	3.668E-03	.1855	2.699E-03
US 2399(131)	31.56	30.56	5.527E-04	.0280	6.772E-04	.0343	7.636E-04	.0386	6.055E-04
NOS 8976(131)	31.56	30.56	5.527E-04	.0280	6.772E-04	.0343	7.636E-04	.0386	6.055E-04
TOP 7400(250)	32.64	31.64	2.537E-03	.1283	3.108E-03	.1572	3.605E-03	.1823	2.652E-03
US 2400(131)	32.64	31.64	5.432E-04	.0275	6.656E-04	.0337	7.585E-04	.0380	5.949E-04
HOT 4477(131)	32.64	31.64	5.432E-04	.0275	6.656E-04	.0337	7.585E-04	.0380	5.949E-04
NOS 8977(131)	32.64	31.64	5.432E-04	.0275	6.656E-04	.0337	7.585E-04	.0380	5.949E-04
HOT 4478(131)	33.71	32.72	5.342E-04	.0270	6.546E-04	.0331	7.381E-04	.0373	5.853E-04
TOP 7401(250)	33.74	32.74	2.396E-03	.1212	3.055E-03	.1545	3.544E-03	.1793	2.608E-03
US 2401(131)	33.74	32.74	5.340E-04	.0270	6.543E-04	.0331	7.378E-04	.0373	5.850E-04
NOS 8978(131)	33.74	32.74	5.340E-04	.0270	6.543E-04	.0331	7.378E-04	.0373	5.850E-04
	34.84		MODEL HAS LEFT CENTERLINE						
TOP 7402(250)	34.82	33.82	2.359E-03	.1193	3.000E-03	.1521	3.487E-03	.1764	2.567E-03
US 2402(131)	34.82	33.82	5.255E-04	.0266	6.438E-04	.0326	7.260E-04	.0367	5.758E-04
HOT 4479(131)	34.82	33.82	5.255E-04	.0266	6.438E-04	.0326	7.260E-04	.0367	5.758E-04
NOS 8979(131)	34.82	33.82	5.255E-04	.0266	6.438E-04	.0326	7.260E-04	.0367	5.758E-04
HOT 4480(131)	35.89	34.89	5.173E-04	.0262	6.336E-04	.0321	7.147E-04	.0362	5.667E-04

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4/10/74

NASA-RI OHIO — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VAS26 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
45	0	7.97	319.7	1272	29.98	.02	30.00	0	0

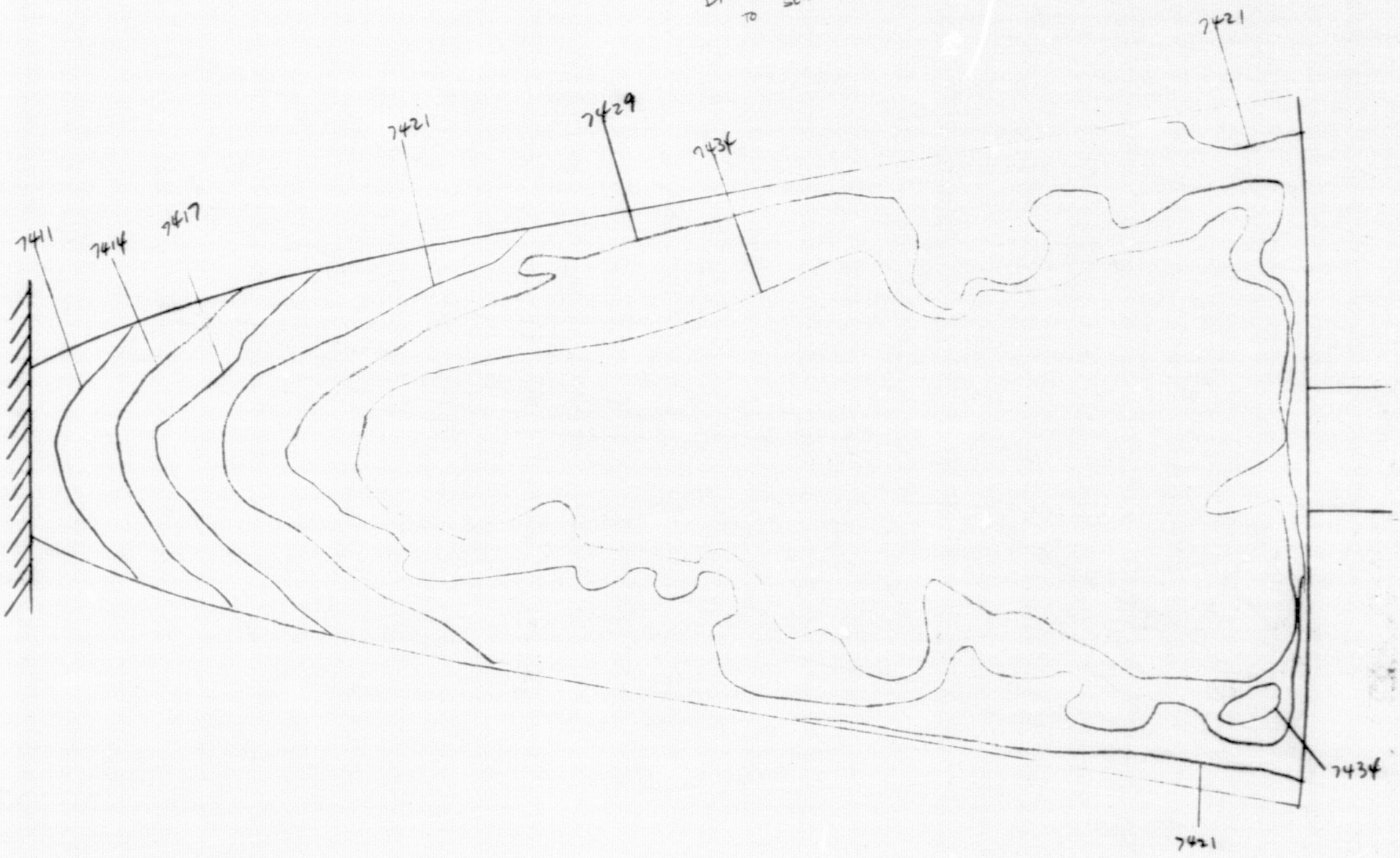
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	XREF (R= .04 FT)	STREF (R= .04 FT)
92.6	.034	1.492	3763	3.032E-05	7.476E-09	1.526E 06	1.977E-02	2.185E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAM)	THAR(TO)	BETA(TO)
NOP SIDE(NOS)	7499	131	83	.0497	6.576E-02	6.1483E-02
OP SIDE(OS)	7738	131	83	.0497	6.576E-02	6.1483E-02
BOTTOM(BOT)	8246	131	83	.0497	6.576E-02	6.1483E-02
TOP(TOP)	8197	250	83	.0551	2.288E-01	2.4882E-01

PIC NO	TIME DEL	TIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7403(250)	35.92	34.92	2.320E-03	.1174	2.956E-03	.1496	3.432E-03	.1736	2.525E-03
OS 2403(131)	35.92	34.92	5.171E-04	.0262	6.336E-04	.0321	7.144E-04	.0361	5.665E-04
NOS 8940(131)	35.92	34.92	5.171E-04	.0262	6.336E-04	.0321	7.144E-04	.0361	5.665E-04
TOP 7404(250)	36.99	35.99	2.285E-03	.1156	2.914E-03	.1474	3.380E-03	.1710	2.489E-03
OS 2404(131)	36.99	35.99	5.193E-04	.0258	6.240E-04	.0316	7.037E-04	.0356	5.583E-04
HOT 4481(131)	36.99	35.99	5.193E-04	.0258	6.240E-04	.0316	7.037E-04	.0356	5.583E-04
NOS 8981(131)	36.99	35.99	5.193E-04	.0258	6.240E-04	.0316	7.037E-04	.0356	5.583E-04

3

DIFFICULT TO SEE



GROUP 47
$\alpha = 25$
$\psi = 0$

3

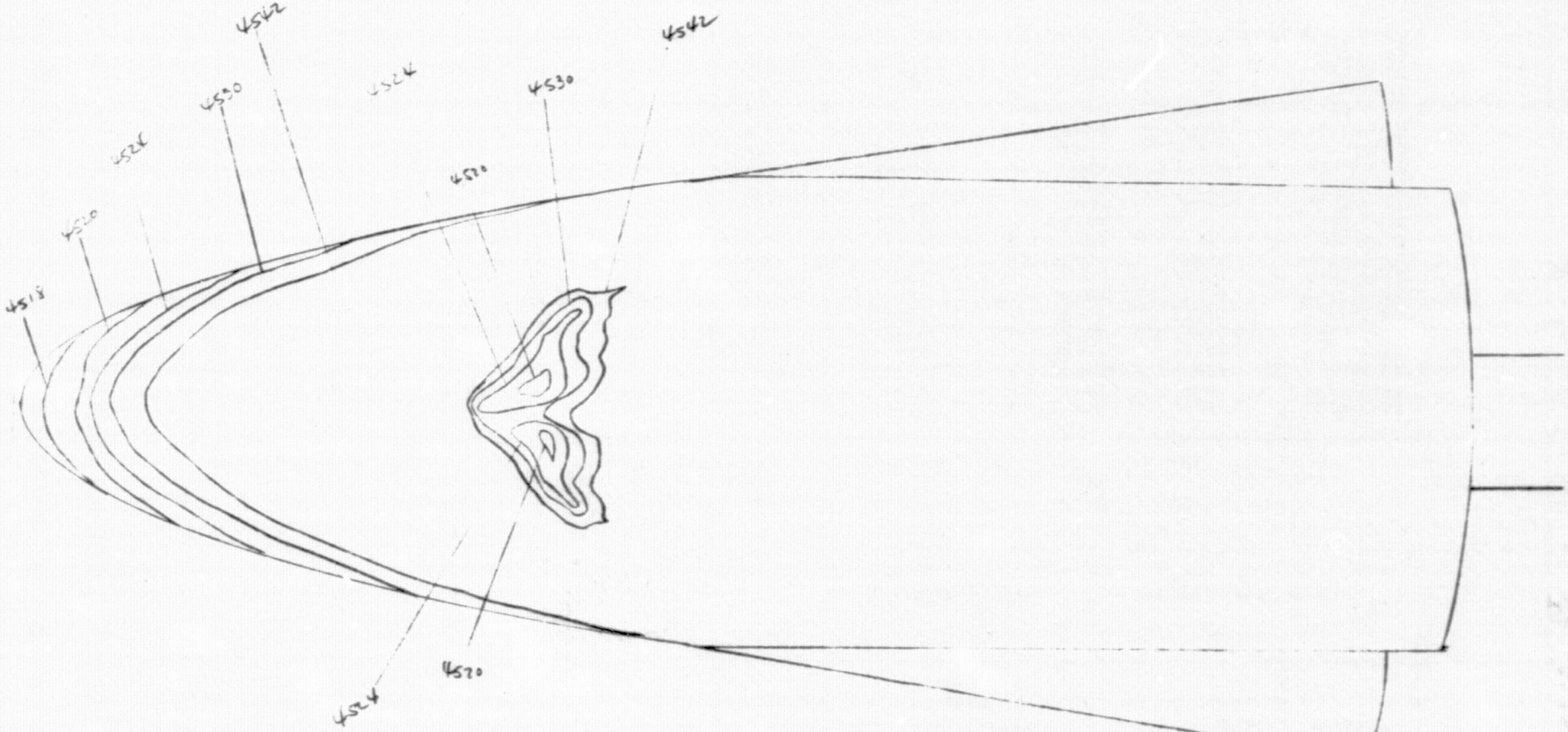
GROUP 47

$\alpha = 25$

$\psi = 0$

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



537

→ LOAD 47

α = 25

ψ = 0

IMPORTANCE OF THIS PAGE IN QUALITY

4/10/74

NASA-RI 0H50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 50 INCH HYPERSONIC TUNNEL B

RUN	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
47	0	7.98	426.5	1298	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.5	.044	1.975	3861	3.942E-05	7.608E-08	1.569E 06	2.285E-02	1.920E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAP(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	84	.0497	0	0
OP SIDE(OS)	7739	131	84	.0497	0	0
BOTTOM(BOT)	8176	131	84	.0497	0	0
TOP(TOP)	8197	225	84	.0541	0	0

PIC NO	TIME DELTIVE	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TO 7405(225)	.03	MODEL HAS NOT REACHED CENTERLINE						
OS 2405(131)	.03	MODEL HAS NOT REACHED CENTERLINE						
HO 4516(131)	.03	MODEL HAS NOT REACHED CENTERLINE						
NO 9016(131)	.03	MODEL HAS NOT REACHED CENTERLINE						
TO 7406(225)	1.10	MODEL HAS NOT REACHED CENTERLINE						
OS 2406(131)	1.10	MODEL HAS NOT REACHED CENTERLINE						
HO 4517(131)	1.10	MODEL HAS NOT REACHED CENTERLINE						
NO 9017(131)	1.10	MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME = 1.80								
TOP 7407(225)	2.16 1.17	9.775E-03	.4280	1.227E-02	.5374	1.408E-02	.6163	9.107E-03
OS 2407(131)	2.18 1.17	2.675E-03	.1171	3.267E-03	.1431	3.673E-03	.1608	2.230E-03
HOT 4518(131)	2.18 1.17	2.675E-03	.1171	3.267E-03	.1431	3.673E-03	.1608	2.230E-03
NOS 9018(131)	2.18 1.17	2.675E-03	.1171	3.267E-03	.1431	3.673E-03	.1608	2.230E-03
TOP 7408(225)	3.25 2.24	7.049E-03	.3089	8.850E-03	.3879	1.015E-02	.4449	5.857E-03
OS 2408(131)	3.25 2.24	1.492E-03	.0645	2.356E-03	.1033	2.649E-03	.1161	1.611E-03
HOT 4519(131)	3.28 2.27	1.918E-03	.0841	2.343E-03	.1027	2.634E-03	.1154	1.601E-03
NOS 9019(131)	3.28 2.27	1.918E-03	.0841	2.343E-03	.1027	2.634E-03	.1154	1.601E-03
TOP 7409(225)	4.36 3.34	5.772E-03	.2530	7.247E-03	.3177	8.312E-03	.3643	4.797E-03
OS 2409(131)	4.36 3.34	1.579E-03	.0692	1.929E-03	.0846	2.169E-03	.0951	1.319E-03
HOT 4520(131)	4.36 3.34	1.579E-03	.0692	1.929E-03	.0846	2.169E-03	.0951	1.319E-03
NOS 9020(131)	4.36 3.34	1.579E-03	.0692	1.929E-03	.0846	2.169E-03	.0951	1.319E-03
HOT 4521(131)	5.43 4.42	1.374E-03	.0602	1.678E-03	.0736	1.886E-03	.0827	1.148E-03
TOP 7410(225)	5.46 4.44	5.006E-03	.2194	6.285E-03	.2756	7.209E-03	.3160	4.161E-03
OS 2410(131)	5.46 4.44	1.370E-03	.0600	1.673E-03	.0733	1.881E-03	.0825	1.144E-03
NOS 9021(131)	5.46 4.44	1.370E-03	.0600	1.673E-03	.0733	1.881E-03	.0825	1.144E-03
TOP 7411(225)	6.53 5.52	4.492E-03	.1969	5.640E-03	.2471	6.468E-03	.2835	3.731E-03
OS 2411(131)	6.53 5.52	1.229E-03	.0539	1.501E-03	.0658	1.688E-03	.0740	1.026E-03
HOT 4522(131)	6.53 5.52	1.229E-03	.0539	1.501E-03	.0658	1.688E-03	.0740	1.026E-03
NOS 9022(131)	6.53 5.52	1.229E-03	.0539	1.501E-03	.0658	1.688E-03	.0740	1.026E-03

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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4/10/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA524

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
47	9	7.98	425.5	1294	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	PE/FT (FT-1)	RREF (R= .04 FT)	STREF (R= .04 FT)
96.5	.044	1.974	3861	3.934E-05	7.009E-08	1.966E 06	2.282E-02	1.922E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACAK)	TRAR(TO)	HETA(TO)
NOF SIDE(NOS)	7576	131	84	.0497	6.233E-02	5.8107E-02
OP SIDE(OS)	7739	131	84	.0497	6.233E-02	5.8107E-02
BOTTOM(BOT)	8176	131	84	.0497	6.233E-02	5.8107E-02
TOP(TOP)	8197	225	84	.0541	1.470E-01	1.9509E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/RREF	H(.9TO)	H(.9TO)/RREF	H(.902TO)	H(.902TO)/RREF	ST(TO)
HOT 4523(131)	7.61	6.80	1.124E-03	.0493	1.374E-03	.0602	1.544E-03	.0677	9.390E-04
TOP 7412(225)	7.62	6.82	4.101E-03	.1796	5.169E-03	.2257	5.906E-03	.2589	3.408E-03
OS 2412(131)	7.63	6.82	1.122E-03	.0492	1.371E-03	.0601	1.541E-03	.0676	9.374E-04
NOS 5023(131)	7.63	6.82	1.122E-03	.0492	1.371E-03	.0601	1.541E-03	.0676	9.374E-04
TOP 7413(225)	8.71	7.70	3.804E-03	.1667	4.770E-03	.2093	5.478E-03	.2401	3.161E-03
HOT 4524(131)	8.71	7.70	1.041E-03	.0456	1.271E-03	.0557	1.429E-03	.0627	8.694E-04
OS 2413(131)	8.74	7.72	1.039E-03	.0456	1.269E-03	.0556	1.427E-03	.0626	8.680E-04
NOS 5024(131)	8.74	7.72	1.039E-03	.0456	1.269E-03	.0556	1.427E-03	.0626	8.680E-04
TOP 7414(225)	9.81	8.80	3.559E-03	.1559	4.467E-03	.1957	5.123E-03	.2245	2.954E-03
HOT 4525(131)	9.81	8.80	9.735E-04	.0427	1.189E-03	.0521	1.337E-03	.0586	8.124E-04
NOS 5025(131)	9.81	8.80	9.735E-04	.0427	1.189E-03	.0521	1.337E-03	.0586	8.124E-04
OS 2414(131)	9.84	8.82	9.722E-04	.0426	1.186E-03	.0520	1.335E-03	.0585	8.115E-04
TOP 7415(225)	10.91	9.90	3.354E-03	.1471	4.211E-03	.1847	4.830E-03	.2118	2.789E-03
OS 2415(131)	10.91	9.90	9.179E-04	.0402	1.121E-03	.0492	1.260E-03	.0553	7.671E-04
HOT 4526(131)	10.91	9.90	9.179E-04	.0402	1.121E-03	.0492	1.260E-03	.0553	7.671E-04
NOS 5026(131)	10.91	9.90	9.179E-04	.0402	1.121E-03	.0492	1.260E-03	.0553	7.671E-04
TOP 7416(225)	11.99	10.99	3.186E-03	.1397	3.999E-03	.1754	4.587E-03	.2011	2.649E-03
OS 2416(131)	12.01	11.00	8.707E-04	.0382	1.064E-03	.0466	1.196E-03	.0524	7.275E-04
HOT 4527(131)	12.01	11.00	8.707E-04	.0382	1.064E-03	.0466	1.196E-03	.0524	7.275E-04
NOS 5027(131)	12.01	11.00	8.707E-04	.0382	1.064E-03	.0466	1.196E-03	.0524	7.275E-04
TOP 7417(225)	13.09	12.08	3.037E-03	.1332	3.813E-03	.1673	4.373E-03	.1919	2.528E-03
OS 2417(131)	13.09	12.08	8.310E-04	.0365	1.015E-03	.0445	1.141E-03	.0501	6.952E-04
HOT 4528(131)	13.09	12.08	8.310E-04	.0365	1.015E-03	.0445	1.141E-03	.0501	6.952E-04
NOS 5028(131)	13.09	12.08	8.310E-04	.0365	1.015E-03	.0445	1.141E-03	.0501	6.952E-04
TOP 7418(225)	14.19	13.18	2.907E-03	.1275	3.650E-03	.1601	4.185E-03	.1836	2.419E-03
OS 2418(131)	14.19	13.18	7.955E-04	.0349	9.717E-04	.0426	1.092E-03	.0479	6.652E-04
HOT 4529(131)	14.19	13.18	7.955E-04	.0349	9.717E-04	.0426	1.092E-03	.0479	6.652E-04
NOS 5029(131)	14.19	13.18	7.955E-04	.0349	9.717E-04	.0426	1.092E-03	.0479	6.652E-04

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NASA-RI OH50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREREND	ROLL-MODEL	YAW
47	0	7.98	424.8	1257	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SIREF (R= .04 FT)
94.4	.044	1.471	3805	3.928E-05	7.684E-08	1.963E 06	2.280E-02	1.923E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAR)	THAR(TO)	BETA(TO)
NOP SIDE(NOS)	7575	131	84	.0497	6.233E-02	5.8107E-02
OP SIDE(OS)	7738	131	84	.0497	6.233E-02	5.8107E-02
BOTTOM(BOT)	8176	131	84	.0497	6.233E-02	5.8107E-02
TOP(TOP)	8197	225	84	.0541	1.870E-01	1.9509E-01

PIC NO	TIME DELTIME		H(I!)	H(I!)/HREF	H(.9I0)	H(.9I0)/HREF	H(.902I0)	H(.902I0)/HREF	ST(I0)
TOP 7419(225)	15.29	14.28	2.759E-03	.1225	3.506E-03	.1539	4.022E-03	.1765	2.325E-03
OS 2419(131)	15.29	14.28	7.542E-04	.0335	9.335E-04	.0410	1.049E-03	.0460	6.394E-04
BOT 4530(131)	15.29	14.28	7.542E-04	.0335	9.335E-04	.0410	1.049E-03	.0460	6.394E-04
NOS 9030(131)	15.29	14.28	7.542E-04	.0335	9.335E-04	.0410	1.049E-03	.0460	6.394E-04
BOT 4531(131)	16.37	15.36	7.369E-04	.0323	9.002E-04	.0395	1.012E-03	.0444	6.165E-04
TOP 7420(225)	16.39	15.38	2.591E-03	.1131	3.379E-03	.1482	3.875E-03	.1700	2.240E-03
OS 2420(131)	16.39	15.38	7.369E-04	.0323	8.995E-04	.0395	1.011E-03	.0444	6.161E-04
NOS 9031(131)	16.39	15.38	7.369E-04	.0323	8.995E-04	.0395	1.011E-03	.0444	6.161E-04
OS 2421(131)	17.47	16.46	7.113E-04	.0312	8.696E-04	.0382	9.775E-04	.0429	5.958E-04
BOT 4532(131)	17.47	16.46	7.113E-04	.0312	8.696E-04	.0382	9.775E-04	.0429	5.958E-04
TOP 7421(225)	17.50	16.48	2.600E-03	.1141	3.264E-03	.1432	3.743E-03	.1643	2.165E-03
NOS 9032(131)	17.50	16.48	7.113E-04	.0312	8.689E-04	.0381	9.758E-04	.0429	5.954E-04
TOP 7422(225)	18.57	17.56	2.519E-03	.1105	3.162E-03	.1388	3.627E-03	.1592	2.098E-03
OS 2422(131)	18.57	17.56	6.892E-04	.0302	8.419E-04	.0369	9.464E-04	.0415	5.769E-04
BOT 4533(131)	18.57	17.56	6.892E-04	.0302	8.419E-04	.0369	9.464E-04	.0415	5.769E-04
NOS 9033(131)	18.57	17.56	6.892E-04	.0302	8.419E-04	.0369	9.464E-04	.0415	5.769E-04
TOP 7423(225)	19.67	18.66	2.443E-03	.1073	3.067E-03	.1347	3.518E-03	.1544	2.036E-03
OS 2423(131)	19.67	18.66	6.685E-04	.0293	8.167E-04	.0359	9.180E-04	.0403	5.599E-04
BOT 4534(131)	19.67	18.66	6.685E-04	.0293	8.167E-04	.0359	9.180E-04	.0403	5.599E-04
NOS 9034(131)	19.67	18.66	6.685E-04	.0293	8.167E-04	.0359	9.180E-04	.0403	5.599E-04
TOP 7424(225)	20.75	19.74	2.387E-03	.1043	2.983E-03	.1310	3.421E-03	.1502	1.980E-03
OS 2424(131)	20.77	19.76	6.496E-04	.0285	7.936E-04	.0348	8.921E-04	.0392	5.442E-04
BOT 4535(131)	20.77	19.76	6.496E-04	.0285	7.936E-04	.0348	8.921E-04	.0392	5.442E-04
NOS 9035(131)	20.77	19.76	6.496E-04	.0285	7.936E-04	.0348	8.921E-04	.0392	5.442E-04
TOP 7425(225)	21.85	20.84	2.312E-03	.1015	2.903E-03	.1274	3.324E-03	.1462	1.926E-03
OS 2425(131)	21.85	20.84	6.326E-04	.0277	7.726E-04	.0339	8.687E-04	.0381	5.298E-04
BOT 4536(131)	21.85	20.84	6.326E-04	.0277	7.726E-04	.0339	8.687E-04	.0381	5.298E-04
NOS 9036(131)	21.85	20.84	6.326E-04	.0278	7.726E-04	.0339	8.687E-04	.0381	5.298E-04

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4/10/74

NASA-RI OHSO

AEDC(AWO-IAC.) ARNOLD AFS. TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
5C INCH HYPERSONIC TUNNEL B

VAS2E

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
47	0	7.98	424.1	1297	25.01	4.99	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	MREF (R= .04 FT)	SREF (R= .04 FT)
94.4	.044	1.948	3803	3.423E-05	7.602E-08	1.961E 06	2.278E-02	1.925E-02

CAMERA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCRK)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	84	.0497	6.233E-02	5.8107E-02
OP SIDE(OS)	7738	131	84	.0497	6.233E-02	5.8107E-02
BOTTOM(BOT)	8176	131	84	.0497	6.233E-02	5.8107E-02
TOP(TOP)	8197	225	84	.0541	1.870E-01	1.9509E-01

PIC NO	TIME DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 7426(225)	22.95 21.94	2.253E-03	.0990	2.829E-03	.1243	3.245E-03	.1425	1.879E-03
OS 2426(131)	22.95 21.94	6.166E-04	.0271	7.532E-04	.0331	8.467E-04	.0372	5.168E-04
NOT 4537(131)	22.95 21.94	6.166E-04	.0271	7.532E-04	.0331	8.467E-04	.0372	5.168E-04
NOS 5037(131)	22.95 21.94	6.166E-04	.0271	7.532E-04	.0331	8.467E-04	.0372	5.168E-04
TOP 7427(225)	24.05 23.04	2.199E-03	.0966	2.761E-03	.1213	3.166E-03	.1391	1.835E-03
OS 2427(131)	24.05 23.04	6.016E-04	.0264	7.349E-04	.0323	8.262E-04	.0363	5.045E-04
NOT 4538(131)	24.05 23.04	6.016E-04	.0264	7.349E-04	.0323	8.262E-04	.0363	5.045E-04
NOS 5038(131)	24.05 23.04	6.016E-04	.0264	7.349E-04	.0323	8.262E-04	.0363	5.045E-04
NOT 4539(131)	25.13 24.12	5.881E-04	.0258	7.184E-04	.0316	8.075E-04	.0355	4.932E-04
TOP 7428(225)	25.15 24.14	2.149E-03	.0944	2.697E-03	.1185	3.093E-03	.1359	1.793E-03
OS 2428(131)	25.15 24.14	5.978E-04	.0262	7.180E-04	.0316	8.071E-04	.0355	4.931E-04
NOS 5039(131)	25.15 24.14	5.978E-04	.0262	7.180E-04	.0316	8.071E-04	.0355	4.931E-04
OS 2429(131)	26.23 25.22	5.751E-04	.0253	7.025E-04	.0309	7.847E-04	.0347	4.825E-04
NOT 4540(131)	26.23 25.22	5.751E-04	.0253	7.025E-04	.0309	7.847E-04	.0347	4.825E-04
NOS 5040(131)	26.23 25.22	5.751E-04	.0253	7.025E-04	.0309	7.847E-04	.0347	4.825E-04
TOP 7429(225)	26.24 25.24	2.101E-03	.0923	2.637E-03	.1159	3.025E-03	.1329	1.754E-03
TOP 7430(225)	27.33 26.32	2.057E-03	.0904	2.583E-03	.1135	2.962E-03	.1301	1.716E-03
OS 2430(131)	27.33 26.32	5.529E-04	.0247	6.876E-04	.0302	7.730E-04	.0340	4.719E-04
NOT 4541(131)	27.33 26.32	5.529E-04	.0247	6.876E-04	.0302	7.730E-04	.0340	4.719E-04
NOS 5041(131)	27.33 26.32	5.529E-04	.0247	6.876E-04	.0302	7.730E-04	.0340	4.719E-04
TOP 7431(225)	28.43 27.42	2.016E-03	.0885	2.530E-03	.1112	2.902E-03	.1275	1.681E-03
OS 2431(131)	28.43 27.42	5.415E-04	.0242	6.737E-04	.0296	7.573E-04	.0333	4.623E-04
NOT 4542(131)	28.43 27.42	5.415E-04	.0242	6.737E-04	.0296	7.573E-04	.0333	4.623E-04
NOS 5042(131)	28.43 27.42	5.415E-04	.0242	6.737E-04	.0296	7.573E-04	.0333	4.623E-04
TOP 7432(225)	29.53 28.52	1.976E-03	.0868	2.481E-03	.1089	2.846E-03	.1250	1.647E-03
OS 2432(131)	29.53 28.52	5.407E-04	.0237	6.606E-04	.0290	7.426E-04	.0326	4.529E-04
NOT 4543(131)	29.53 28.52	5.407E-04	.0237	6.606E-04	.0290	7.426E-04	.0326	4.529E-04
NOS 5043(131)	29.53 28.52	5.407E-04	.0237	6.606E-04	.0290	7.426E-04	.0326	4.529E-04

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NASA-RT OH60

AEDC(AHO)(AC) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREHEND	ROLL-MODEL	YAW
47	0	7.98	424.0	1256	25.01	4.99	30.00	0	0

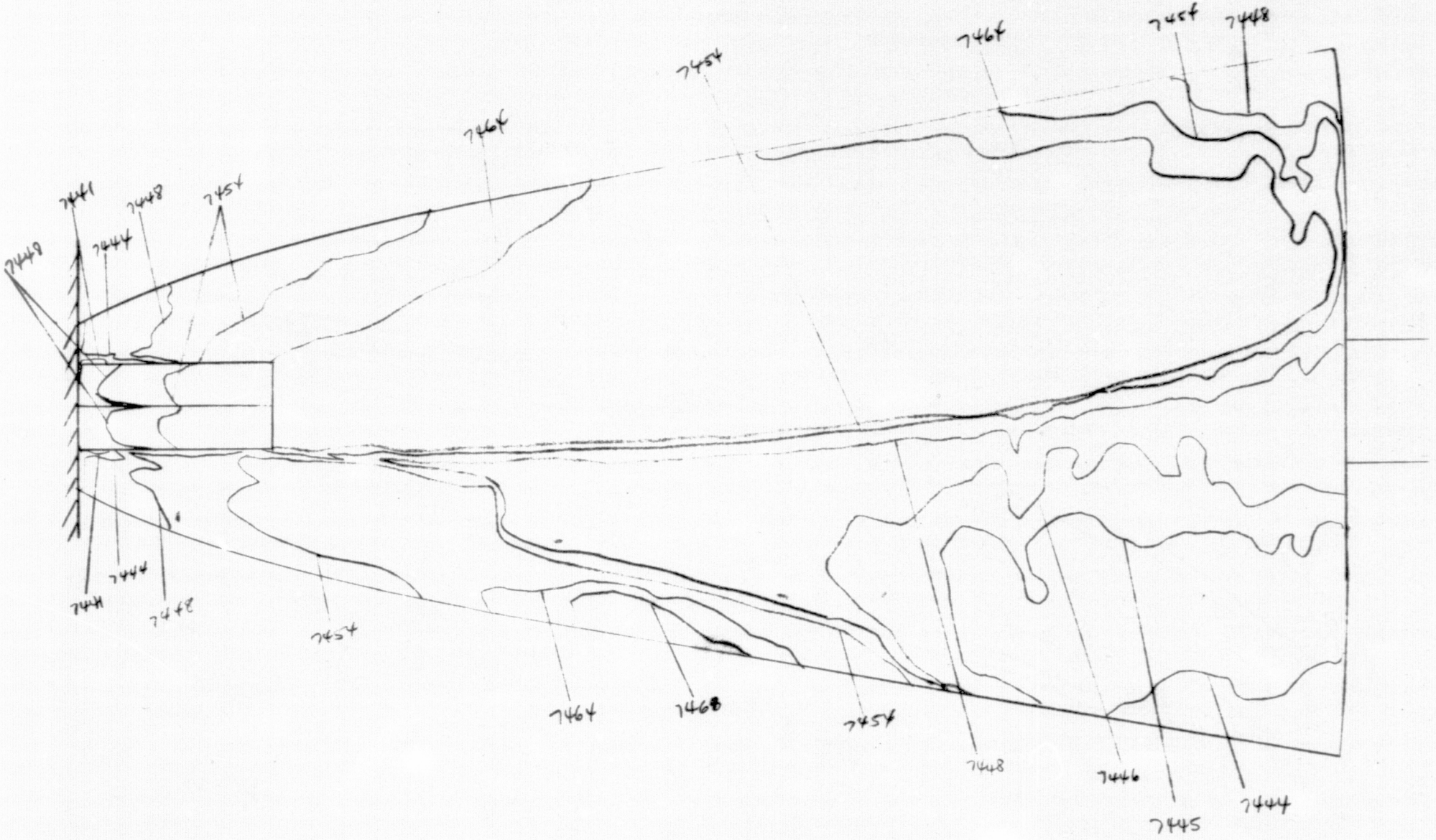
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.044	1.48E	3749	3.923E-05	7.599E-08	1.961E 06	2.277E-02	1.924E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAR)	TPAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	84	.0497	6.233E-02	5.8107E-02
OP SIDE(OS)	7738	131	84	.0497	6.233E-02	5.8107E-02
BOTTOM(BOT)	8176	131	84	.0497	6.233E-02	5.8107E-02
TOP(TOP)	8197	225	84	.0541	1.870E-01	1.9509E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
OS 7433(131)	30.61	29.40	5.308E-04	.0233	5.48?E-04	.0285	7.249E-04	.0320	4.445E-04
HOT 4544(131)	30.61	29.40	5.308E-04	.0233	6.484E-04	.0285	7.249E-04	.0320	4.445E-04
TOP 7433(225)	30.64	29.42	1.?39E-03	.0461	2.435E-03	.1060	2.742E-03	.1226	1.615E-03
NOS 7044(131)	30.64	29.42	5.306E-04	.0233	6.482E-04	.0285	7.246E-04	.0320	4.443E-04
TOP 7434(225)	31.71	30.70	1.905E-03	.0836	2.342E-03	.1050	2.743E-03	.1204	1.586E-03
OS 2434(131)	31.71	30.70	5.212E-04	.0229	6.367E-04	.0279	7.157E-04	.0314	4.361E-04
HOT 4545(131)	31.71	30.70	5.212E-04	.0229	6.367E-04	.0279	7.157E-04	.0314	4.361E-04
NOS 5045(131)	31.71	30.70	5.212E-04	.0229	6.367E-04	.0279	7.157E-04	.0314	4.361E-04
	32.14		MODEL HAS LEFT CENTERLINE						
TOP 7435(225)	32.81	31.80	1.872E-03	.0822	2.350E-03	.1032	2.695E-03	.1184	1.561E-03
OS 2435(131)	32.81	31.80	5.121E-04	.0225	6.256E-04	.0275	7.032E-04	.0309	4.292E-04
HOT 4546(131)	32.81	31.80	5.121E-04	.0225	6.256E-04	.0275	7.032E-04	.0309	4.292E-04
NOS 5046(131)	32.81	31.80	5.121E-04	.0225	6.256E-04	.0275	7.032E-04	.0309	4.292E-04
TOP 7436(225)	33.91	32.90	1.848E-03	.0807	2.310E-03	.1014	2.650E-03	.1163	1.531E-03
OS 2436(131)	33.91	32.90	5.035E-04	.0221	6.150E-04	.0270	6.914E-04	.0303	4.211E-04
HOT 4547(131)	33.91	32.90	5.035E-04	.0221	6.150E-04	.0270	6.914E-04	.0303	4.211E-04
NOS 5047(131)	33.91	32.90	5.035E-04	.0221	6.150E-04	.0270	6.914E-04	.0303	4.211E-04
HOT 4548(131)	34.99	33.98	4.954E-04	.0217	6.052E-04	.0266	6.803E-04	.0298	4.142E-04
TOP 7437(225)	35.02	34.00	1.810E-03	.0794	2.272E-03	.0997	2.606E-03	.1143	1.506E-03
OS 2437(131)	35.02	34.00	4.953E-04	.0217	6.050E-04	.0265	6.801E-04	.0298	4.141E-04
NOS 5048(131)	35.02	34.00	4.953E-04	.0217	6.050E-04	.0265	6.801E-04	.0298	4.141E-04

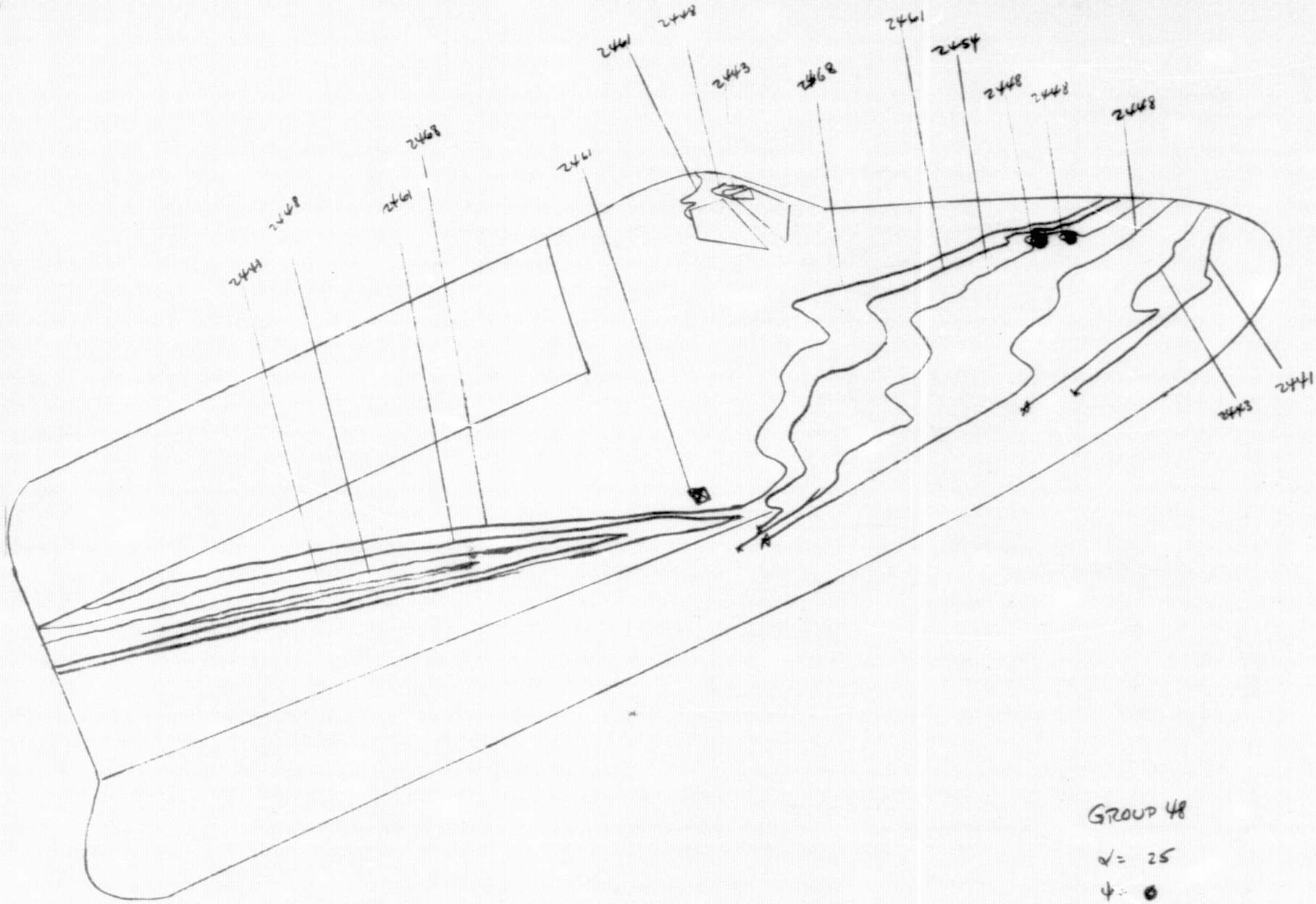
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GROUP 48
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$\psi = 0$

PORTIONS MAY BE ILLEGIBLE

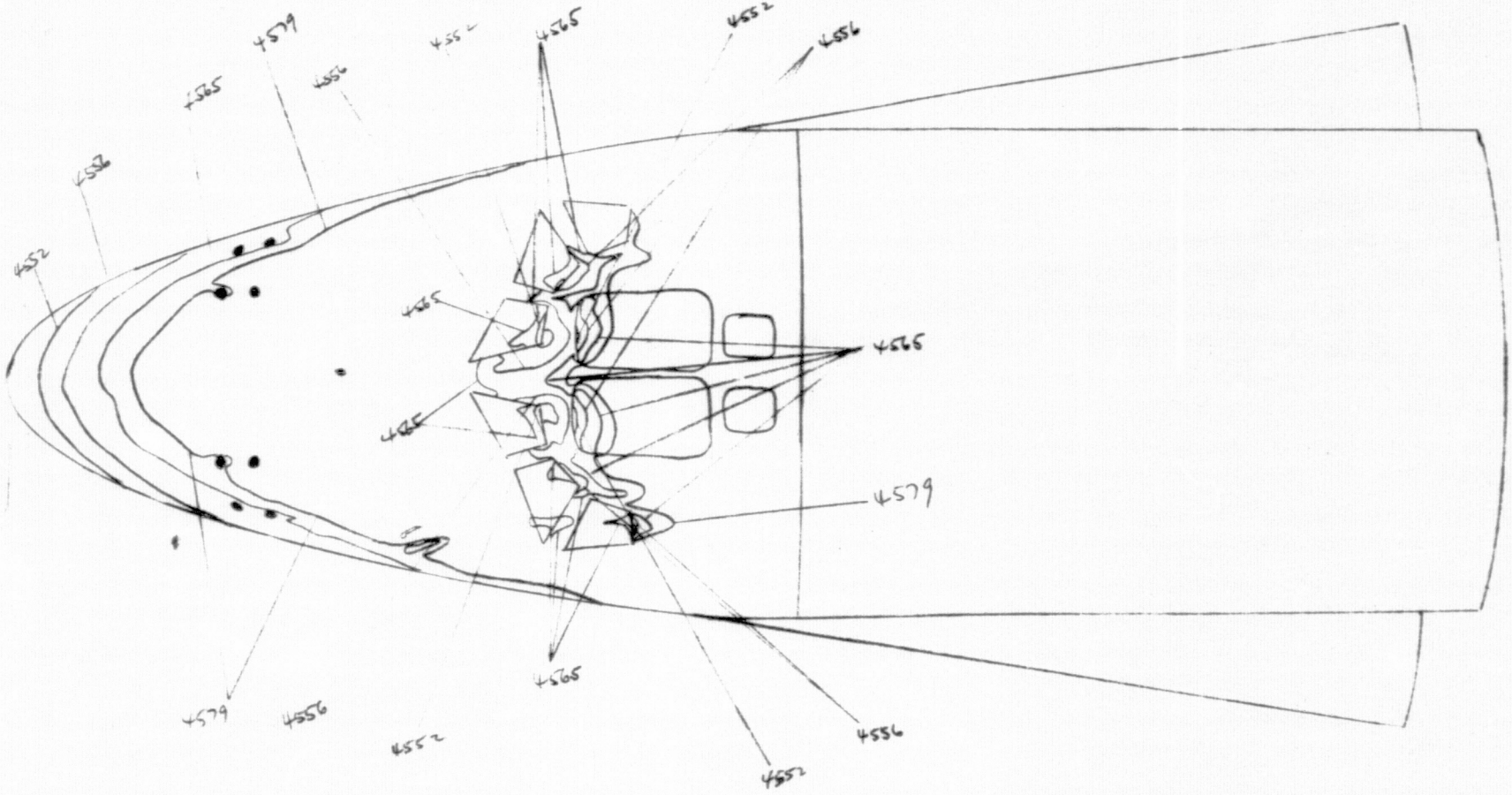


544

GROUP 48

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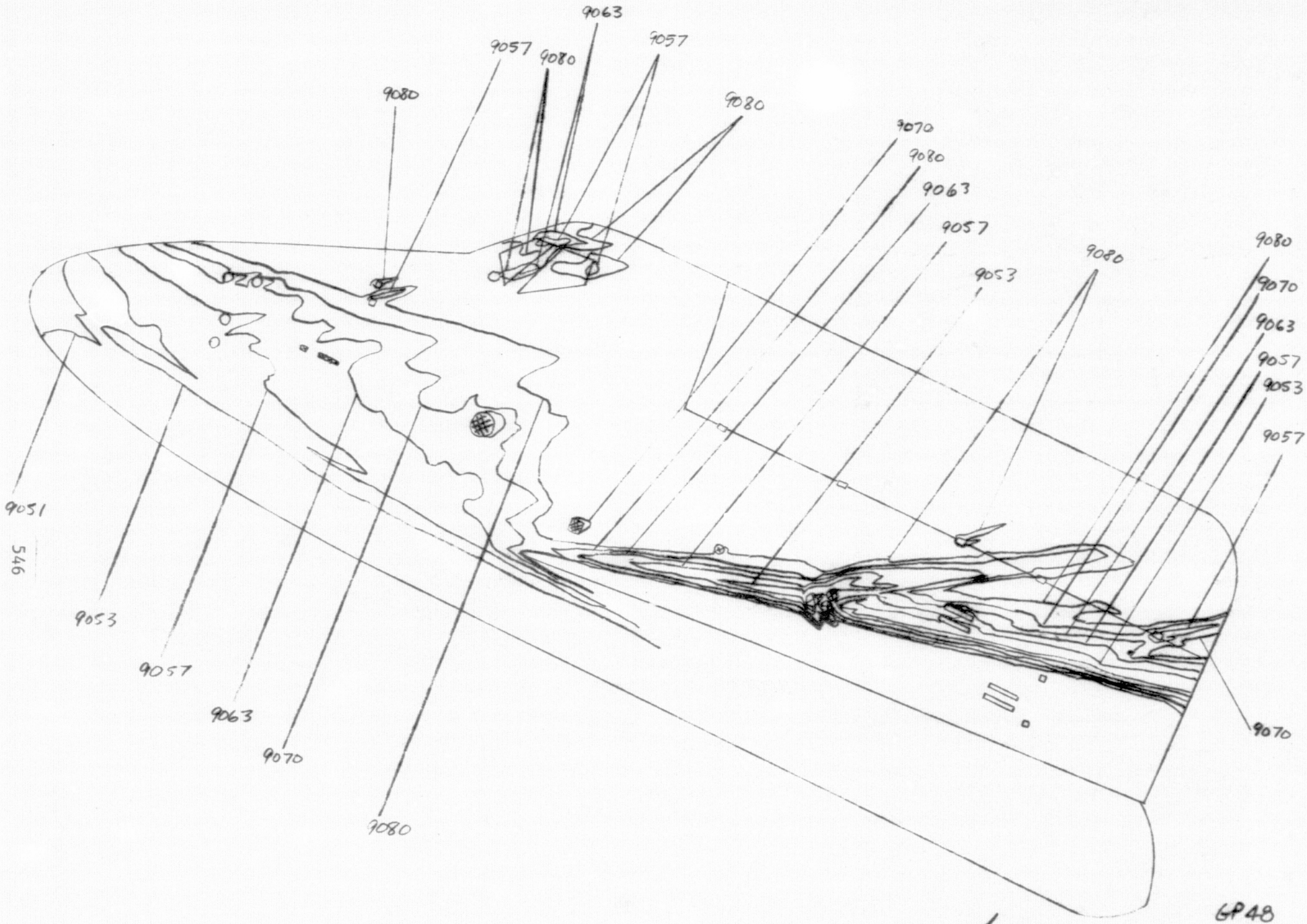
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GROUP 48

$\alpha = 25$

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4-25

NASA-RT OH50

VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG F)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
49	0	7.98	425.6	1281	25.00	5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	RL-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.3	.044	1.975	3774	3.698E-05	7.559E-04	2.005E 06	2.277E-02	1.907E-02

CAMERA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (HMACAK)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	84	.0497	0	0
OP SIDE(OS)	7736	131	84	.0497	0	0
BOTTOM(BOT)	8176	131	84	.0497	0	0
TOP(TOP)	8197	250	84	.0551	0	0

PIC NO	TIME DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TO 7436(250)	.03	MODEL HAS NOT REACHED CENTERLINE						
OS 7436(131)	.03	MODEL HAS NOT REACHED CENTERLINE						
NO 4548(131)	.03	MODEL HAS NOT REACHED CENTERLINE						
NO 8048(131)	.03	MODEL HAS NOT REACHED CENTERLINE						
TO 7439(250)	1.10	MODEL HAS NOT REACHED CENTERLINE						
OS 2439(131)	1.10	MODEL HAS NOT REACHED CENTERLINE						
NO 4551(131)	1.10	MODEL HAS NOT REACHED CENTERLINE						
NO 8051(131)	1.10	MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.75							
TOP 7440(250)	2.18 1.18	1.233E-02	.5936	1.576E-02	.6918	1.825E-02	.5013	1.021E-02
OS 2440(131)	2.18 1.18	2.724E-03	.1196	3.334E-03	.1464	3.756E-03	.1649	2.260E-03
NOT 4551(131)	2.18 1.18	2.724E-03	.1196	3.334E-03	.1464	3.756E-03	.1649	2.260E-03
NOS 8051(131)	2.18 1.18	2.724E-03	.1196	3.334E-03	.1464	3.756E-03	.1649	2.260E-03
TOP 7441(250)	3.25 2.26	8.454E-03	.3925	1.139E-02	.5001	1.320E-02	.5792	7.374E-03
OS 2441(131)	3.25 2.26	1.478E-03	.0865	2.411E-03	.1058	2.716E-03	.1192	1.633E-03
NOT 4552(131)	3.25 2.26	1.478E-03	.0865	2.411E-03	.1058	2.716E-03	.1192	1.633E-03
NOS 8052(131)	3.25 2.26	1.478E-03	.0865	2.411E-03	.1058	2.716E-03	.1192	1.633E-03
TOP 7442(250)	4.33 3.33	7.367E-03	.3235	9.370E-03	.4117	1.086E-02	.4768	6.073E-03
OS 2442(131)	4.33 3.33	1.021E-03	.0712	1.984E-03	.0971	2.235E-03	.0981	1.345E-03
NOT 4553(131)	4.36 3.36	1.215E-03	.0709	1.977E-03	.0868	2.226E-03	.0977	1.339E-03
NOS 8053(131)	4.36 3.36	1.215E-03	.0709	1.977E-03	.0868	2.226E-03	.0977	1.339E-03
TOP 7443(250)	5.43 4.43	6.347E-03	.2802	8.128E-03	.3566	9.415E-03	.4131	5.258E-03
OS 2443(131)	5.43 4.43	1.405E-03	.0817	1.720E-03	.0755	1.937E-03	.0850	1.164E-03
NOT 4554(131)	5.43 4.43	1.405E-03	.0817	1.720E-03	.0755	1.937E-03	.0850	1.164E-03
NOS 8054(131)	5.43 4.43	1.405E-03	.0817	1.720E-03	.0755	1.937E-03	.0850	1.164E-03
NOT 4555(131)	6.51 5.51	1.261E-03	.0563	1.543E-03	.0677	1.734E-03	.0763	1.045E-03

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NASA-RI 0H60

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

VAS26

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG F)	ALPHA-MODEL	ALPHA-SECTCH	ALPHA-PRESEND	ROLL-MODEL	YAW
48	0	7.98	426.3	1251	25.00	5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.3	.044	1.478	3776	3.092E-05	7.5[illegible]E-08	2.305E 06	2.279E-02	1.905E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	THAP(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	84	.0497	6.377E-02	5.9538E-02
OP SIDE(OS)	7738	131	84	.0497	6.377E-02	5.9538E-02
NOTCH(R)T)	8176	131	84	.0497	6.377E-02	5.9538E-02
TOP(TOP)	8197	250	84	.0551	2.252E-01	2.4407E-01

PIC NO	TIME DELTIME		H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 7444(250)	6.53	5.53	5.714E-03	.2509	7.275E-03	.3193	6.426E-03	.2698	4.709E-03
OS 7444(131)	6.53	5.53	1.255E-03	.0552	1.539E-03	.0676	1.734E-03	.0761	1.043E-03
NOS 8055(131)	6.53	5.53	1.255E-03	.0552	1.539E-03	.0676	1.734E-03	.0761	1.043E-03
TOP 7445(250)	7.61	6.61	5.239E-03	.2295	6.650E-03	.2921	7.710E-03	.3383	4.307E-03
OS 7445(131)	7.61	6.61	1.151E-03	.0505	1.409E-03	.0618	1.547E-03	.0696	9.537E-04
HOT 4556(131)	7.61	6.61	1.151E-03	.0505	1.409E-03	.0618	1.547E-03	.0696	9.537E-04
NOS 8056(131)	7.61	6.61	1.151E-03	.0505	1.409E-03	.0618	1.547E-03	.0696	9.537E-04
TOP 7446(250)	8.71	7.71	4.436E-03	.2125	6.163E-03	.2704	7.138E-03	.3132	3.987E-03
OS 7446(131)	8.71	7.71	1.166E-03	.0468	1.304E-03	.0572	1.469E-03	.0645	8.828E-04
HOT 4557(131)	8.71	7.71	1.166E-03	.0468	1.304E-03	.0572	1.469E-03	.0645	8.828E-04
NOS 8057(131)	8.71	7.71	1.166E-03	.0468	1.304E-03	.0572	1.469E-03	.0645	8.828E-04
TOP 7447(250)	9.79	8.79	4.836E-03	.1991	5.773E-03	.2533	6.687E-03	.2934	3.736E-03
OS 7447(131)	9.79	8.79	9.[illegible]91E-04	.0438	1.222E-03	.0536	1.376E-03	.0604	8.273E-04
HOT 4558(131)	9.79	8.79	9.[illegible]91E-04	.0438	1.222E-03	.0536	1.376E-03	.0604	8.273E-04
NOS 8058(131)	9.79	8.79	9.[illegible]91E-04	.0438	1.222E-03	.0536	1.376E-03	.0604	8.273E-04
TOP 7448(250)	10.89	9.89	4.274E-03	.1877	5.442E-03	.2388	6.304E-03	.2766	3.522E-03
OS 7448(131)	10.89	9.89	9.409E-04	.0413	1.152E-03	.0505	1.297E-03	.0569	7.799E-04
HOT 4559(131)	10.89	9.89	9.409E-04	.0413	1.152E-03	.0505	1.297E-03	.0569	7.799E-04
NOS 8059(131)	10.89	9.89	9.409E-04	.0413	1.152E-03	.0505	1.297E-03	.0569	7.799E-04
TOP 7449(250)	11.96	10.97	4.061E-03	.1783	5.164E-03	.2270	5.986E-03	.2629	3.348E-03
OS 7449(131)	11.96	10.97	8.936E-04	.0392	1.094E-03	.0480	1.232E-03	.0541	7.415E-04
HOT 4560(131)	11.96	10.97	8.936E-04	.0392	1.094E-03	.0480	1.232E-03	.0541	7.415E-04
NOS 8060(131)	11.96	10.97	8.936E-04	.0392	1.094E-03	.0480	1.232E-03	.0541	7.415E-04
TOP 7450(250)	13.07	12.07	3.971E-03	.1624	4.927E-03	.2162	5.707E-03	.2504	3.187E-03
OS 7450(131)	13.07	12.07	8.[illegible]19E-04	.0374	1.043E-03	.0458	1.174E-03	.0515	7.059E-04
HOT 4561(131)	13.07	12.07	8.[illegible]19E-04	.0374	1.043E-03	.0458	1.174E-03	.0515	7.059E-04
NOS 8061(131)	13.07	12.07	8.519E-04	.0374	1.043E-03	.0458	1.174E-03	.0515	7.059E-04

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NASA-RT 0HE0 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VASZE — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREHEND	ROLL-MODEL	YAW
48	0	7.98	426.3	1281	25.00	5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (RE .04 FT)	STREF (RE .04 FT)
93.2	.044	1.478	3778	3.693E-05	7.507E-08	2.009E 06	2.279E-02	1.905E-02

CAMERA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (HMACAK)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	84	.0497	6.377E-02	5.9538E-02
UP SIDE(US)	7738	131	84	.0497	6.377E-02	5.9538E-02
BOTTOM(BOT)	8176	131	84	.0497	6.377E-02	5.9538E-02
TOP(TOP)	8197	250	84	.0551	2.752E-01	2.4407E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 7451(250)	14.14	13.14	3.709E-03	.1627	4.721E-03	.2071	5.468E-03	.2399	3.053E-03
OS 2451(131)	14.14	13.14	8.142E-04	.0358	9.990E-04	.0438	1.125E-03	.0494	6.760E-04
HOT 4562(131)	14.14	13.14	8.142E-04	.0358	9.990E-04	.0438	1.125E-03	.0494	6.760E-04
NOS 8062(131)	14.14	13.14	8.142E-04	.0358	9.990E-04	.0438	1.125E-03	.0494	6.760E-04
TOP 7452(250)	15.24	14.24	3.563E-03	.1563	4.535E-03	.1990	5.252E-03	.2304	2.932E-03
OS 2452(131)	15.24	14.24	7.646E-04	.0344	9.596E-04	.0421	1.041E-03	.0474	6.494E-04
HOT 4563(131)	15.24	14.24	7.646E-04	.0344	9.596E-04	.0421	1.041E-03	.0474	6.494E-04
NOS 8063(131)	15.24	14.24	7.646E-04	.0344	9.596E-04	.0421	1.041E-03	.0474	6.494E-04
TOP 7453(250)	16.32	15.32	3.434E-03	.1507	4.373E-03	.1918	5.064E-03	.2222	2.827E-03
HOT 4564(131)	16.32	15.32	7.390E-04	.0332	9.253E-04	.0406	1.042E-03	.0457	6.260E-04
OS 2453(131)	16.34	15.35	7.554E-04	.0331	9.245E-04	.0406	1.041E-03	.0457	6.258E-04
NOS 8064(131)	16.34	15.35	7.554E-04	.0331	9.245E-04	.0406	1.041E-03	.0457	6.258E-04
TOP 7454(250)	17.42	16.42	3.319E-03	.1456	4.223E-03	.1853	4.892E-03	.2146	2.730E-03
OS 2454(131)	17.42	16.42	7.502E-04	.0329	8.937E-04	.0392	1.007E-03	.0442	6.046E-04
HOT 4565(131)	17.42	16.42	7.502E-04	.0329	8.937E-04	.0392	1.007E-03	.0442	6.046E-04
NOS 8065(131)	17.42	16.42	7.502E-04	.0329	8.937E-04	.0392	1.007E-03	.0442	6.046E-04
HOT 4566(131)	18.50	17.50	7.074E-04	.0310	8.656E-04	.0380	9.752E-04	.0428	5.860E-04
TOP 7455(250)	18.52	17.52	3.213E-03	.1410	4.089E-03	.1794	4.736E-03	.2078	2.644E-03
OS 2455(131)	18.52	17.52	7.059E-04	.0310	8.652E-04	.0380	9.745E-04	.0428	5.856E-04
NOS 8066(131)	18.52	17.52	7.059E-04	.0310	8.652E-04	.0380	9.745E-04	.0428	5.856E-04
TOP 7456(250)	19.60	18.60	3.118E-03	.1368	3.959E-03	.1741	4.596E-03	.2016	2.565E-03
OS 2456(131)	19.60	18.60	6.861E-04	.0301	8.398E-04	.0368	9.459E-04	.0415	5.680E-04
HOT 4567(131)	19.60	18.60	6.861E-04	.0301	8.398E-04	.0368	9.459E-04	.0415	5.680E-04
NOS 8067(131)	19.61	18.60	6.861E-04	.0301	8.398E-04	.0368	9.459E-04	.0415	5.680E-04
HOT 4568(131)	20.67	19.68	6.671E-04	.0293	8.165E-04	.0358	9.197E-04	.0403	5.526E-04

549

NASA-FT ARSD — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA52A — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
4B	0	7.98	426.5	1291	25.00	5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.3	.044	1.575	3776	3.934E-05	7.508E-08	2.209E 06	2.270E-02	1.905E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOAC**K)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	84	.0497	6.377E-02	5.9538E-02
OP SIDE(OS)	7738	131	84	.0497	6.377E-02	5.9538E-02
BOTTOM(BOT)	8176	131	84	.0497	6.377E-02	5.9538E-02
TOP(TOP)	8197	250	84	.0551	2.252E-01	2.4407E-01

PIC NO	TIME	DELTIME	H(IC)	H(IC)/HREF	H(.9IC)	H(.9IC)/HREF	H(.902IC)	H(.902IC)/HREF	ST.'0)
TOP 7457(250)	20.70	19.70	3.030E-03	.1329	3.950E-03	.1692	4.466E-03	.1959	2.493E-03
OS 2457(131)	20.70	19.70	6.057E-04	.0292	8.159E-04	.0358	9.191E-04	.0403	5.521E-04
NOS 6068(131)	20.70	19.70	6.057E-04	.0292	8.159E-04	.0358	9.191E-04	.0403	5.521E-04
TOP 7458(250)	21.78	20.78	2.950E-03	.1295	3.755E-03	.1648	4.349E-03	.1908	2.428E-03
OS 2458(131)	21.78	20.78	6.492E-04	.0225	7.945E-04	.0349	8.950E-04	.0393	5.378E-04
BOT 4569(131)	21.79	20.79	6.492E-04	.0285	7.945E-04	.0349	8.950E-04	.0393	5.378E-04
NOS 6069(131)	21.78	20.78	6.492E-04	.0285	7.945E-04	.0349	8.950E-04	.0393	5.378E-04
TOP 7459(250)	22.88	21.88	2.975E-03	.1261	3.659E-03	.1605	4.238E-03	.1859	2.365E-03
OS 2459(131)	22.88	21.88	6.326E-04	.0278	7.743E-04	.0340	8.722E-04	.0383	5.238E-04
BOT 4570(131)	22.88	21.88	6.326E-04	.0278	7.743E-04	.0340	8.722E-04	.0383	5.238E-04
NOS 6070(131)	22.88	21.88	6.326E-04	.0278	7.743E-04	.0340	8.722E-04	.0383	5.238E-04
TOP 7460(250)	23.95	22.95	2.907E-03	.1232	3.572E-03	.1567	4.138E-03	.1815	2.310E-03
OS 2460(131)	23.95	22.95	6.176E-04	.0271	7.559E-04	.0332	8.515E-04	.0374	5.115E-04
BOT 4571(131)	23.95	22.95	6.176E-04	.0271	7.559E-04	.0332	8.515E-04	.0374	5.115E-04
NOS 6071(131)	23.95	22.95	6.176E-04	.0271	7.559E-04	.0332	8.515E-04	.0374	5.115E-04
TOP 7461(250)	25.05	24.06	2.742E-03	.1203	3.490E-03	.1531	4.042E-03	.1773	2.255E-03
OS 2461(131)	25.05	24.06	6.033E-04	.0265	7.384E-04	.0324	8.318E-04	.0365	4.994E-04
BOT 4572(131)	25.05	24.06	6.033E-04	.0265	7.384E-04	.0324	8.318E-04	.0365	4.994E-04
NOS 6072(131)	25.05	24.06	6.033E-04	.0265	7.384E-04	.0324	8.318E-04	.0365	4.994E-04
TOP 7462(250)	26.13	25.13	2.683E-03	.1177	3.416E-03	.1498	3.954E-03	.1735	2.207E-03
OS 2462(131)	26.13	25.13	5.902E-04	.0259	7.224E-04	.0317	8.138E-04	.0357	4.887E-04
BOT 4573(131)	26.13	25.13	5.902E-04	.0259	7.224E-04	.0317	8.138E-04	.0357	4.887E-04
NOS 6073(131)	26.13	25.13	5.902E-04	.0259	7.221E-04	.0317	8.133E-04	.0357	4.883E-04
TOP 7463(250)	27.23	26.23	2.626E-03	.1152	3.342E-03	.1466	3.870E-03	.1698	2.160E-03
OS 2463(131)	27.23	26.23	5.777E-04	.0253	7.071E-04	.0310	7.965E-04	.0349	4.783E-04
BOT 4574(131)	27.23	26.23	5.777E-04	.0253	7.071E-04	.0310	7.965E-04	.0349	4.783E-04
NOS 6074(131)	27.23	26.23	5.777E-04	.0253	7.071E-04	.0310	7.965E-04	.0349	4.783E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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4/19/74

NASA-RI OH50 AEDC(APO,INC.) ARNOLD AFS, TENNESSEE

VON KARMAN GAS DYNAMICS FACILITY

VAS26 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PRESENO	ROLL-MODEL	YAW
48	0	7.98	426.6	1220	25.00	5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.2	.[illegible]	1.[illegible]	377[illegible]	[illegible]E-05	7.505E-08	2.011E 06	2.290E-02	1.904E-02

CAMERA	ROLL TO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACRA)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	84	.0497	6.377E-02	5.9538E-02
OP SIDE(OS)	7738	131	84	.0497	6.377E-02	5.9538E-02
BOTTOM(BOT)	8176	131	84	.0497	6.377E-02	5.9538E-02
TOP(TOP)	8197	250	84	.0551	2.252E-01	2.4407E-01

PIC NO	TIME OF	TIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
HOT 4575(131)	28.31	27.31	5.662E-04	.0248	6.930E-04	.0304	7.806E-04	.0342	4.688E-04
TOP 7464(250)	28.33	27.33	2.572E-03	.1128	3.274E-03	.1436	3.742E-03	.1663	2.116E-03
OS 2464(131)	28.33	27.33	5.663E-04	.0248	6.927E-04	.0304	7.803E-04	.0342	4.686E-04
NOS 4575(131)	28.33	27.33	5.662E-04	.0248	6.927E-04	.0304	7.803E-04	.0342	4.686E-04
TOP 7465(250)	29.41	28.41	2.523E-03	.1107	3.211E-03	.1409	3.719E-03	.1632	2.077E-03
OS 2465(131)	29.41	28.41	5.651E-04	.0244	6.795E-04	.0298	7.654E-04	.0336	4.600E-04
HOT 4576(131)	29.41	28.41	5.651E-04	.0244	6.795E-04	.0298	7.654E-04	.0336	4.600E-04
NOS 4576(131)	29.41	28.41	5.651E-04	.0244	6.795E-04	.0298	7.654E-04	.0336	4.600E-04
TOP 7466(250)	30.51	29.51	2.476E-03	.1086	3.151E-03	.1382	3.649E-03	.1600	2.036E-03
OS 2466(131)	30.51	29.51	5.447E-04	.0239	6.667E-04	.0292	7.509E-04	.0329	4.508E-04
HOT 4577(131)	30.51	29.51	5.447E-04	.0239	6.667E-04	.0292	7.519E-04	.0329	4.508E-04
NOS 4577(131)	30.51	29.51	5.447E-04	.0239	6.667E-04	.0292	7.509E-04	.0329	4.508E-04
TOP 7467(250)	31.59	30.59	2.432E-03	.1067	3.095E-03	.1358	3.584E-03	.1573	2.001E-03
HOT 4578(131)	31.59	30.59	5.258E-04	.0235	6.548E-04	.0287	7.376E-04	.0324	4.431E-04
OS 2467(131)	31.61	30.61	5.344E-04	.0235	6.546E-04	.0287	7.373E-04	.0324	4.431E-04
NOS 4578(131)	31.61	30.61	5.348E-04	.0235	6.546E-04	.0287	7.373E-04	.0324	4.431E-04
TOP 7468(250)	32.69	31.69	2.399E-03	.1048	3.040E-03	.1333	3.521E-03	.1544	1.964E-03
OS 2468(131)	32.69	31.69	5.256E-04	.0231	6.433E-04	.0282	7.247E-04	.0318	4.350E-04
HOT 4579(131)	32.69	31.69	5.256E-04	.0231	6.433E-04	.0282	7.247E-04	.0318	4.350E-04
NOS 4579(131)	32.69	31.69	5.256E-04	.0231	6.433E-04	.0282	7.247E-04	.0318	4.350E-04
TOP 7469(250)	33.79	32.79	2.349E-03	.1030	2.989E-03	.1311	3.462E-03	.1519	1.932E-03
OS 2469(131)	33.79	32.79	5.167E-04	.0227	6.325E-04	.0277	7.124E-04	.0313	4.278E-04
HOT 4580(131)	33.79	32.79	5.167E-04	.0227	6.325E-04	.0277	7.124E-04	.0313	4.278E-04
NOS 4580(131)	33.79	32.79	5.167E-04	.0227	6.325E-04	.0277	7.124E-04	.0313	4.278E-04
	34.59		MODEL WAS LEFT CENTERLINE						

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4/10/74

NASA-PI OHEO

VA526

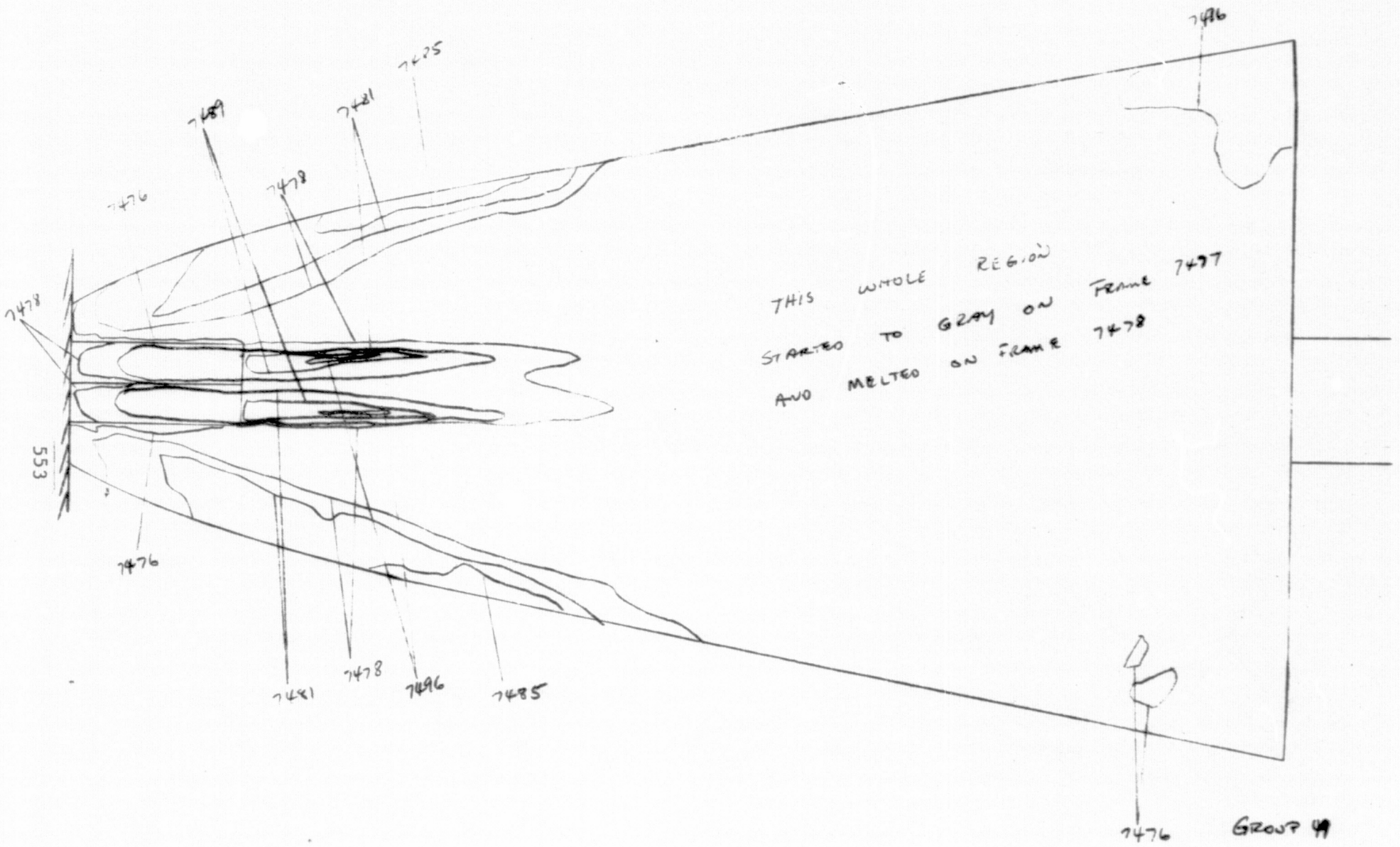
AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

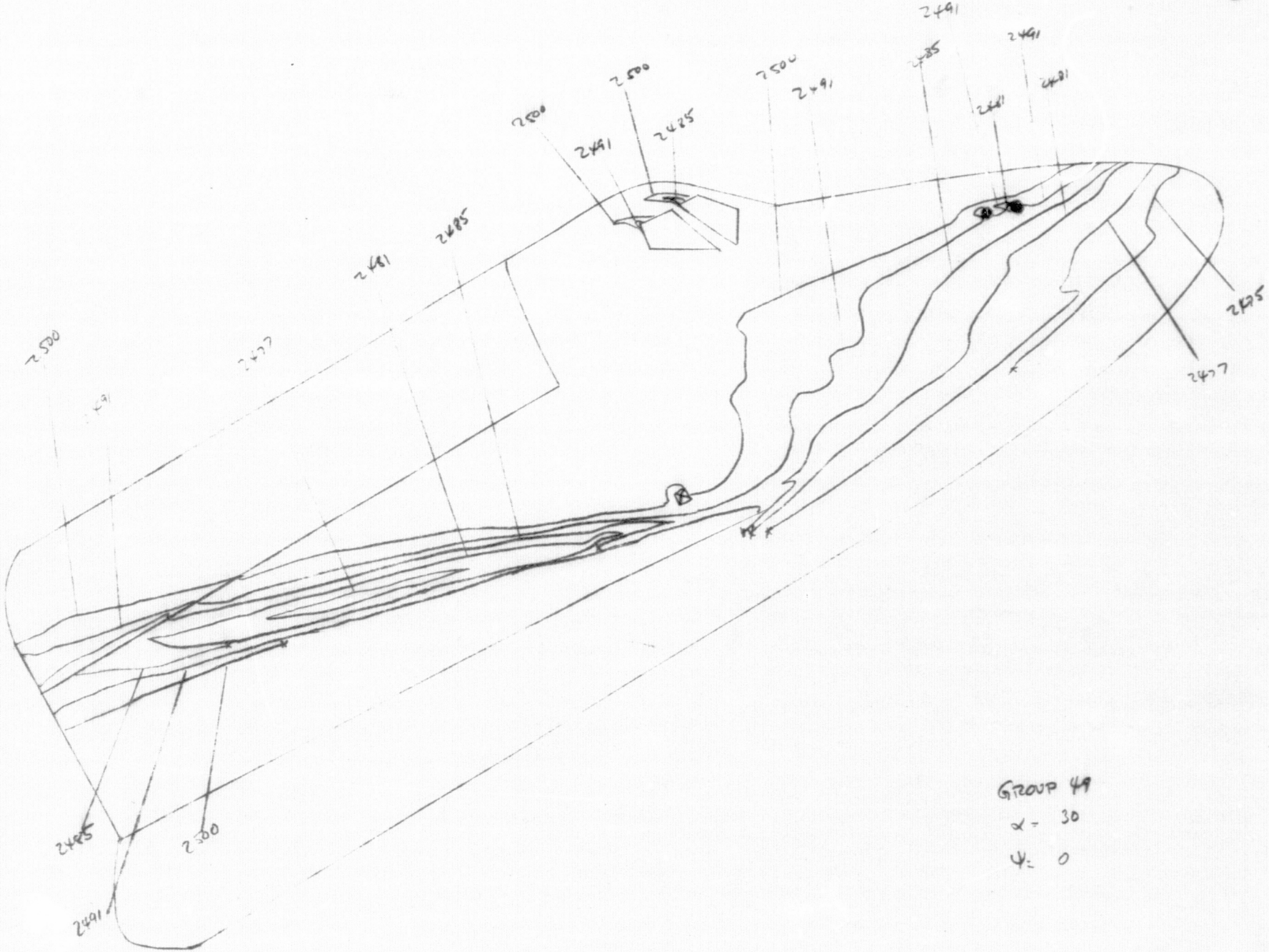
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
46	0	7.98	426.7	1250	25.00	5.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	ML-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.2	.044	1.4[illegible]	37[illegible]	3.[illegible]E-05	7.5[illegible]E-08	2.011E 06	2.290E-02	1.404E-02

CAMERA	ROLL TO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	THAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	84	.0497	6.377E-02	5.9538E-02
OP SIDE(OS)	7734	131	84	.0497	6.377E-02	5.9538E-02
BOTTOM(BOT)	8176	131	84	.0497	6.377E-02	5.9538E-02
TOP(TOP)	8197	250	84	.0551	2.252E-01	2.4407E-01

PIC NO	TIME DELTIVE		H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.902TO)	H(.902TO)/HREF	ST(TO)
TOP 7470(250)	34.87	33.87	2.411E-03	.1014	2.941E-03	.1290	3.406E-03	.1494	1.901E-03
OS 2470(131)	34.87	33.87	5.[illegible]55E-04	.0223	6.223E-04	.0273	7.010E-04	.0307	4.209E-04
BOT 45-1(131)	34.87	33.87	5.[illegible]55E-04	.0223	6.223E-04	.0273	7.010E-04	.0307	4.209E-04
NOS 5041(131)	34.87	33.87	5.[illegible]55E-04	.0223	6.223E-04	.0273	7.010E-04	.0307	4.209E-04
TOP 7471(250)	35.97	34.97	2.[illegible]74E-03	.1097	2.894E-03	.1269	3.342E-03	.1470	1.870E-03
OS 2471(131)	35.97	34.97	5.[illegible]04E-04	.0219	6.124E-04	.0269	6.899E-04	.0303	4.141E-04
BOT 45-2(131)	35.97	34.97	5.[illegible]04E-04	.0219	6.124E-04	.0269	6.899E-04	.0303	4.141E-04
NOS 5042(131)	35.97	34.97	5.[illegible]04E-04	.0219	6.124E-04	.0269	6.899E-04	.0303	4.141E-04


7486
7485
7481
7478
7476
7478
553
7476
7481
7478
7496
7485
7476
THIS WHOLE REGION
STARTED TO GRAY ON FRAME 7477
AND MELTED ON FRAME 7478
GROUP 49
α: 30
ψ: 0

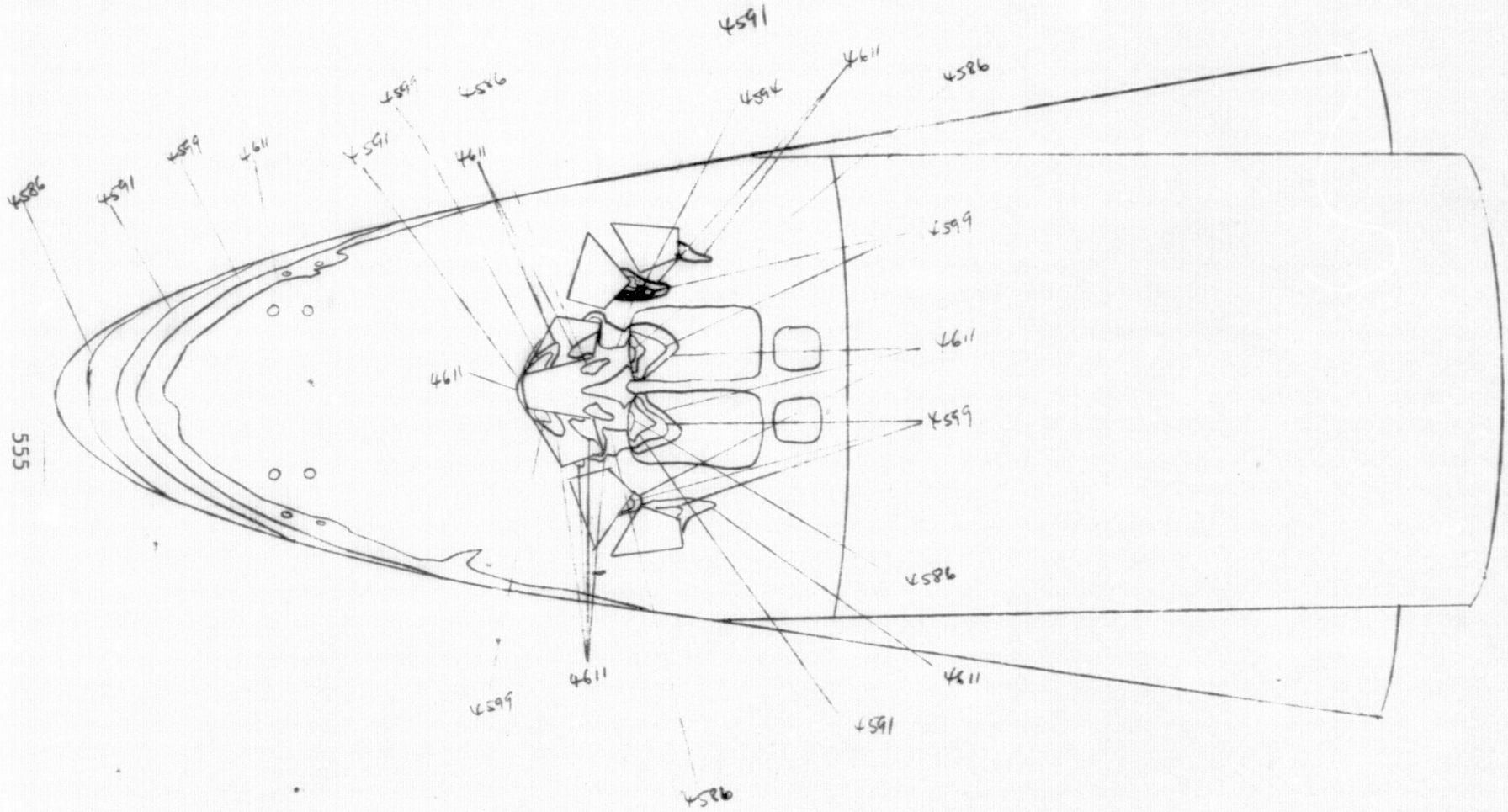


GROUP 49
$\alpha = 30$
$\psi = 0$

554

REPRODUCIBILITY OF THE

OH-58A



555

Group 49
$\nu = 30$
$\psi = 0$

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

4/10/74

NASA-RI OHSC

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VAS2B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG F)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
49	C	7.98	425.4	1285	30.00	0	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.6	.044	1.974	3782	3.971E-05	7.532E-08	1.594E 06	2.278E-02	1.911E-02

CAMERA	ROLL TO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCAKK)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	87	.0497	0	0
UP SIDE(OS)	7738	131	87	.0497	0	0
BOTTOM(BOT)	8176	131	87	.0497	0	0
TOP(TOP)	8197	275	87	.0560	0	0

PIC NO	TIME DELTIME		H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
NO 4583(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 7472(275)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 2472(131)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 9083(131)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 7473(275)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 2473(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 4584(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 9084(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =		1.83							
NOT 4585(131)	2.18	1.15	2.566E-03	.1126	3.141E-03	.1379	3.536E-03	.1552	2.133E-03
TOP 7474(275)	2.20	1.18	1.469E-02	.4448	1.887E-02	.5714	2.203E-02	.6667	1.212E-02
OS 2474(131)	2.20	1.18	2.539E-03	.1114	3.108E-03	.1364	3.498E-03	.1536	2.111E-03
NOS 9085(131)	2.20	1.18	2.539E-03	.1114	3.108E-03	.1364	3.498E-03	.1536	2.111E-03
TOP 7475(275)	3.28	2.25	1.462E-02	.4659	1.864E-02	.5985	1.532E-02	.6985	8.754E-03
OS 2475(131)	3.28	2.25	1.835E-03	.0805	2.246E-03	.0986	2.528E-03	.1109	1.525E-03
NOT 4586(131)	3.28	2.25	1.835E-03	.0805	2.246E-03	.0986	2.528E-03	.1109	1.525E-03
NOS 9086(131)	3.28	2.25	1.835E-03	.0805	2.246E-03	.0986	2.528E-03	.1109	1.525E-03
NOT 4587(131)	4.38	3.33	1.509E-03	.0662	1.848E-03	.0810	2.080E-03	.0912	1.253E-03
TOP 7476(275)	4.38	3.35	8.702E-03	.3817	1.118E-02	.4904	1.305E-02	.5723	7.171E-03
OS 2476(131)	4.38	3.35	1.504E-03	.0660	1.841E-03	.0808	2.072E-03	.0909	1.249E-03
NOS 9087(131)	4.38	3.35	1.504E-03	.0660	1.841E-03	.0808	2.072E-03	.0909	1.249E-03
TOP 7477(275)	5.46	4.43	7.571E-03	.3320	9.727E-03	.4265	1.135E-02	.4977	6.233E-03
OS 2477(131)	5.46	4.43	1.309E-03	.0574	1.602E-03	.0702	1.803E-03	.0791	1.086E-03
NOT 4588(131)	5.46	4.43	1.309E-03	.0574	1.602E-03	.0702	1.803E-03	.0791	1.086E-03
NOS 9088(131)	5.46	4.43	1.309E-03	.0574	1.602E-03	.0702	1.803E-03	.0791	1.086E-03
NOT 4589(131)	6.53	5.51	1.174E-03	.0515	1.437E-03	.0630	1.617E-03	.0709	9.742E-04

NASA-RI OH50

AEDC(APO,TAC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
49	C	7.98	426.3	1206	36.00	0	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SIREF (R= .04 FT)
93.6	.044	1.978	3783	3.978E-05	7.535E-08	1.997E 06	2.280E-02	1.909E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	87	.0497	5.960E-02	5.5418E-02
UP SIDE(US)	7738	131	87	.0497	5.960E-02	5.5418E-02
BOTTOM(BOT)	8176	131	87	.0497	5.960E-02	5.5418E-02
TOP(TOP)	8197	275	87	.0560	2.547E-01	2.8459E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7478(275)	6.56	5.53	6.774E-03	.2972	8.705E-03	.3818	1.016E-02	.4455	5.591E-03
US 2478(131)	6.56	5.53	1.171E-03	.0514	1.433E-03	.0629	1.614E-03	.0708	9.720E-04
NOS 8089(131)	6.56	5.53	1.171E-03	.0514	1.433E-03	.0629	1.614E-03	.0708	9.720E-04
TOP 7479(275)	7.63	6.61	6.200E-03	.2718	7.965E-03	.3492	9.295E-03	.4076	5.105E-03
US 2479(131)	7.63	6.61	1.071E-03	.0470	1.312E-03	.0575	1.476E-03	.0647	8.891E-04
HOT 4590(131)	7.63	6.61	1.071E-03	.0470	1.312E-03	.0575	1.476E-03	.0647	8.891E-04
NOS 8090(131)	7.63	6.61	1.071E-03	.0470	1.312E-03	.0575	1.476E-03	.0647	8.891E-04
TOP 7480(275)	8.74	7.71	5.740E-03	.2518	7.376E-03	.3235	8.605E-03	.3775	4.731E-03
US 2480(131)	8.74	7.71	9.925E-04	.0435	1.214E-03	.0533	1.367E-03	.0600	8.240E-04
HOT 4591(131)	8.74	7.71	9.920E-04	.0435	1.214E-03	.0533	1.367E-03	.0600	8.240E-04
NOS 8091(131)	8.74	7.71	9.920E-04	.0435	1.214E-03	.0533	1.367E-03	.0600	8.240E-04
TOP 7481(275)	9.81	8.79	5.377E-03	.2358	6.906E-03	.3029	8.061E-03	.3535	4.428E-03
US 2481(131)	9.81	8.79	9.292E-04	.0407	1.137E-03	.0499	1.280E-03	.0561	7.713E-04
HOT 4592(131)	9.81	8.79	9.292E-04	.0407	1.137E-03	.0499	1.280E-03	.0561	7.713E-04
NOS 8092(131)	9.81	8.79	9.292E-04	.0407	1.137E-03	.0499	1.280E-03	.0561	7.713E-04
TOP 7482(275)	10.91	9.89	5.068E-03	.2222	6.511E-03	.2854	7.599E-03	.3331	4.171E-03
US 2482(131)	10.91	9.89	8.759E-04	.0384	1.072E-03	.0470	1.207E-03	.0529	7.264E-04
HOT 4593(131)	10.91	9.89	8.759E-04	.0384	1.072E-03	.0470	1.207E-03	.0529	7.264E-04
NOS 8093(131)	10.91	9.89	8.759E-04	.0384	1.072E-03	.0470	1.207E-03	.0529	7.264E-04
TOP 7483(275)	11.99	10.96	4.813E-03	.2110	6.184E-03	.2711	7.216E-03	.3163	3.962E-03
US 2483(131)	11.99	10.96	8.318E-04	.0365	1.018E-03	.0446	1.146E-03	.0502	6.900E-04
HOT 4594(131)	11.99	10.96	8.318E-04	.0365	1.018E-03	.0446	1.146E-03	.0502	6.900E-04
NOS 8094(131)	11.99	10.96	8.318E-04	.0365	1.018E-03	.0446	1.146E-03	.0502	6.900E-04
TOP 7484(275)	13.09	12.06	4.559E-03	.2011	5.895E-03	.2583	6.879E-03	.3015	3.775E-03
US 2484(131)	13.09	12.06	7.939E-04	.0348	9.706E-04	.0425	1.093E-03	.0479	6.575E-04
HOT 4595(131)	13.09	12.06	7.939E-04	.0348	9.706E-04	.0425	1.093E-03	.0479	6.575E-04
NOS 8095(131)	13.09	12.06	7.939E-04	.0348	9.706E-04	.0425	1.093E-03	.0479	6.575E-04

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4/10/74

NASA-PI 0H50

AEDC(AHO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
49	0	7.98	426.8	1265	30.00	0	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
93.6	.049	1.YPC	3783	3.4A2E-05	7.537E-08	1.599E 06	2.2A2E-02	1.909E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RNOACXR)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	87	.0497	5.960E-02	5.5418E-02
UP SIDE(US)	7739	131	87	.0497	5.960E-02	5.5418E-02
NOTTOM(NOT)	8176	131	87	.0497	5.960E-02	5.5418E-02
TOP(TOP)	8197	275	87	.0560	2.547E-01	2.8459E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7485(275)	14.17	13.14	4.396E-03	.1928	5.648E-03	.2477	6.591E-03	.2890	3.621E-03
NOT 4556(131)	14.17	13.14	7.599E-04	.0333	9.300E-04	.0408	1.047E-03	.0459	6.388E-04
US 2485(131)	14.19	13.17	7.591E-04	.0333	9.292E-04	.0407	1.046E-03	.0459	6.299E-04
NOS 5096(131)	14.19	13.17	7.591E-04	.0333	9.292E-04	.0407	1.046E-03	.0459	6.299E-04
TOP 7486(275)	15.27	14.24	4.223E-03	.1852	5.425E-03	.2380	6.331E-03	.2777	3.480E-03
US 2486(131)	15.27	14.24	7.298E-04	.0320	8.934E-04	.0392	1.006E-03	.0441	6.062E-04
NOT 4557(131)	15.27	14.24	7.298E-04	.0320	8.934E-04	.0392	1.006E-03	.0441	6.062E-04
NOS 5097(131)	15.27	14.24	7.298E-04	.0320	8.934E-04	.0392	1.006E-03	.0441	6.062E-04
NOT 4558(131)	16.34	15.32	7.037E-04	.0309	8.614E-04	.0378	9.697E-04	.0425	5.840E-04
TOP 7487(275)	16.37	15.34	4.069E-03	.1783	5.227E-03	.2291	6.100E-03	.2673	3.348E-03
US 2487(131)	16.37	15.34	7.032E-04	.0308	8.607E-04	.0377	9.689E-04	.0425	5.831E-04
NOS 5098(131)	16.37	15.34	7.032E-04	.0308	8.607E-04	.0377	9.689E-04	.0425	5.831E-04
TOP 7488(275)	17.45	16.42	3.933E-03	.1725	5.053E-03	.2216	5.897E-03	.2586	3.241E-03
US 2488(131)	17.45	16.42	6.797E-04	.0298	8.320E-04	.0365	9.366E-04	.0411	5.644E-04
NOT 4559(131)	17.45	16.42	6.797E-04	.0298	8.320E-04	.0365	9.366E-04	.0411	5.644E-04
NOS 5099(131)	17.45	16.42	6.797E-04	.0298	8.320E-04	.0365	9.366E-04	.0411	5.644E-04
TOP 7489(275)	18.52	17.50	3.818E-03	.1670	4.905E-03	.2145	5.712E-03	.2503	3.134E-03
US 2489(131)	18.52	17.50	6.585E-04	.0289	8.060E-04	.0353	9.073E-04	.0398	5.459E-04
NOT 4560(131)	18.55	17.52	6.580E-04	.0288	8.054E-04	.0353	9.067E-04	.0397	5.459E-04
NOS 5100(131)	18.55	17.52	6.580E-04	.0288	8.054E-04	.0353	9.067E-04	.0397	5.459E-04
TOP 7490(275)	19.62	18.60	3.496E-03	.1529	4.768E-03	.2081	5.541E-03	.2428	3.041E-03
US 2490(131)	19.62	18.60	6.387E-04	.0280	7.818E-04	.0343	8.800E-04	.0386	5.297E-04
NOT 4601(131)	19.62	18.60	6.387E-04	.0280	7.818E-04	.0343	8.800E-04	.0386	5.297E-04
NOS 5101(131)	19.62	18.60	6.387E-04	.0280	7.818E-04	.0343	8.800E-04	.0386	5.297E-04
TOP 7491(275)	20.72	19.70	3.491E-03	.1573	4.613E-03	.2021	5.383E-03	.2360	2.994E-03
US 2491(131)	20.72	19.70	6.206E-04	.0272	7.596E-04	.0333	8.551E-04	.0375	5.145E-04
NOT 4602(131)	20.72	19.70	6.206E-04	.0272	7.596E-04	.0333	8.551E-04	.0375	5.145E-04
NOS 5102(131)	20.72	19.70	6.206E-04	.0272	7.596E-04	.0333	8.551E-04	.0375	5.145E-04

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NASA-RI OHSO — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
49	0	7.98	426.9	1286	30.00	0	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.6	.044	1.981	3764	3.981E-05	7.539E-08	1.598E 06	2.282E-02	1.909E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	87	.0497	5.960E-02	5.541BE-02
OP SIDE(OS)	7738	131	87	.0497	5.960E-02	5.541BE-02
BOTTOM(BOT)	8176	131	87	.0497	5.960E-02	5.541BE-02
TOP(TOP)	8197	275	87	.0560	2.547E-01	2.8459E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7492(275)	21.80	20.77	3.497E-03	.1532	4.492E-03	.1969	5.242E-03	.2297	2.877E-03
OS 2492(131)	21.80	20.77	6.043E-04	.0265	7.397E-04	.0324	8.327E-04	.0365	5.011E-04
HOT 4663(131)	21.80	20.77	6.043E-04	.0265	7.397E-04	.0324	8.327E-04	.0365	5.011E-04
NOS 5103(131)	21.80	20.77	6.043E-04	.0265	7.397E-04	.0324	8.327E-04	.0365	5.011E-04
TOP 7493(275)	22.90	21.88	3.407E-03	.1493	4.378E-03	.1918	5.109E-03	.2238	2.802E-03
OS 2493(131)	22.90	21.88	5.889E-04	.0258	7.206E-04	.0316	8.114E-04	.0355	4.880E-04
HOT 4664(131)	22.90	21.88	5.889E-04	.0258	7.206E-04	.0316	8.114E-04	.0355	4.880E-04
NOS 5104(131)	22.90	21.89	5.889E-04	.0258	7.206E-04	.0316	8.114E-04	.0355	4.880E-04
TOP 7494(275)	23.98	22.95	3.327E-03	.1457	4.274E-03	.1872	4.987E-03	.2185	2.736E-03
OS 2494(131)	23.98	22.95	5.749E-04	.0252	7.037E-04	.0308	7.922E-04	.0347	4.766E-04
HOT 4665(131)	23.98	22.95	5.749E-04	.0252	7.037E-04	.0308	7.922E-04	.0347	4.766E-04
NOS 5105(131)	23.98	22.95	5.749E-04	.0252	7.037E-04	.0308	7.922E-04	.0347	4.766E-04
TOP 7495(275)	25.08	24.05	3.243E-03	.1423	4.175E-03	.1829	4.872E-03	.2134	2.671E-03
OS 2495(131)	25.08	24.05	5.616E-04	.0246	6.874E-04	.0301	7.738E-04	.0339	4.653E-04
HOT 4666(131)	25.08	24.05	5.616E-04	.0246	6.874E-04	.0301	7.738E-04	.0339	4.653E-04
NOS 5106(131)	25.08	24.05	5.616E-04	.0246	6.874E-04	.0301	7.738E-04	.0339	4.653E-04
HOT 4667(131)	26.16	25.13	5.494E-04	.0241	6.725E-04	.0295	7.571E-04	.0332	4.554E-04
TOP 7496(275)	26.19	25.15	3.179E-03	.1392	4.082E-03	.1789	4.764E-03	.2087	2.614E-03
OS 2496(131)	26.19	25.15	5.492E-04	.0241	6.722E-04	.0295	7.567E-04	.0332	4.552E-04
NOS 5107(131)	26.19	25.15	5.492E-04	.0241	6.722E-04	.0295	7.567E-04	.0332	4.552E-04
TOP 7497(275)	27.26	26.23	3.112E-03	.1363	3.998E-03	.1751	4.665E-03	.2043	2.559E-03
OS 2497(131)	27.26	26.23	5.379E-04	.0236	6.583E-04	.0288	7.419E-04	.0325	4.456E-04
HOT 4668(131)	27.26	26.23	5.379E-04	.0236	6.583E-04	.0288	7.410E-04	.0325	4.456E-04
NOS 5108(131)	27.26	26.23	5.379E-04	.0236	6.583E-04	.0288	7.410E-04	.0325	4.456E-04
OS 2498(131)	28.33	27.31	5.271E-04	.0231	6.452E-04	.0282	7.263E-04	.0318	4.364E-04

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4/10/74

NASA-RI ONES0

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

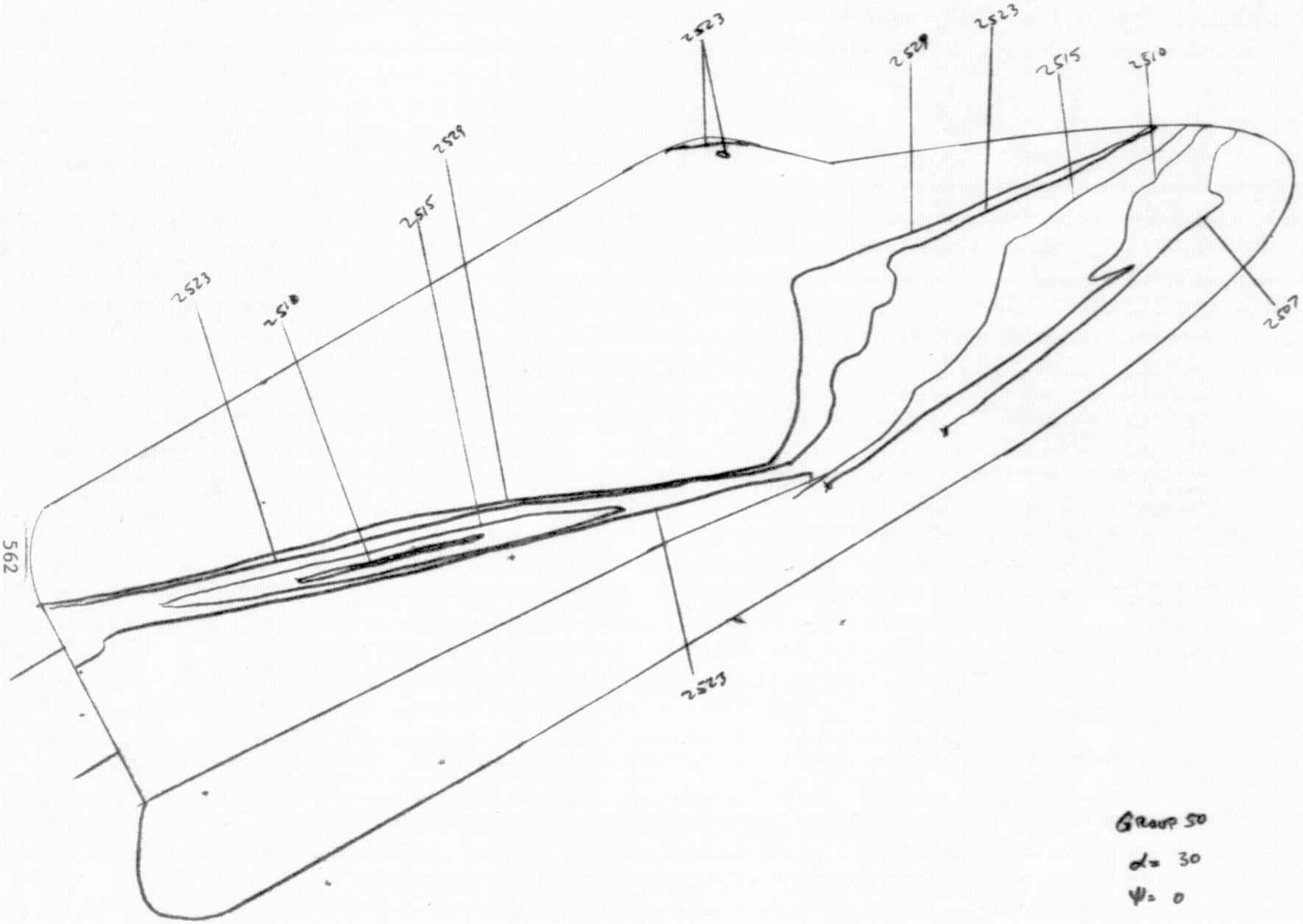
VAS26

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
49	0	7.98	427.6	1287	30.00	0	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (R= .04 FT)	STREF (R= .04 FT)
93.7	.045	1.984	3785	3.287E-05	7.542E-08	2.001E 06	2.284E-02	1.904E-02

CAMERA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAK)	TRAR(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	87	.0497	5.960E-02	5.541BE-02
OP SIDE(OS)	7738	131	87	.0497	5.960E-02	5.541BE-02
BOTTOM(BOT)	8176	131	87	.0497	5.960E-02	5.541BE-02
TOP(TOP)	8197	275	87	.0560	2.547E-01	2.8459E-01

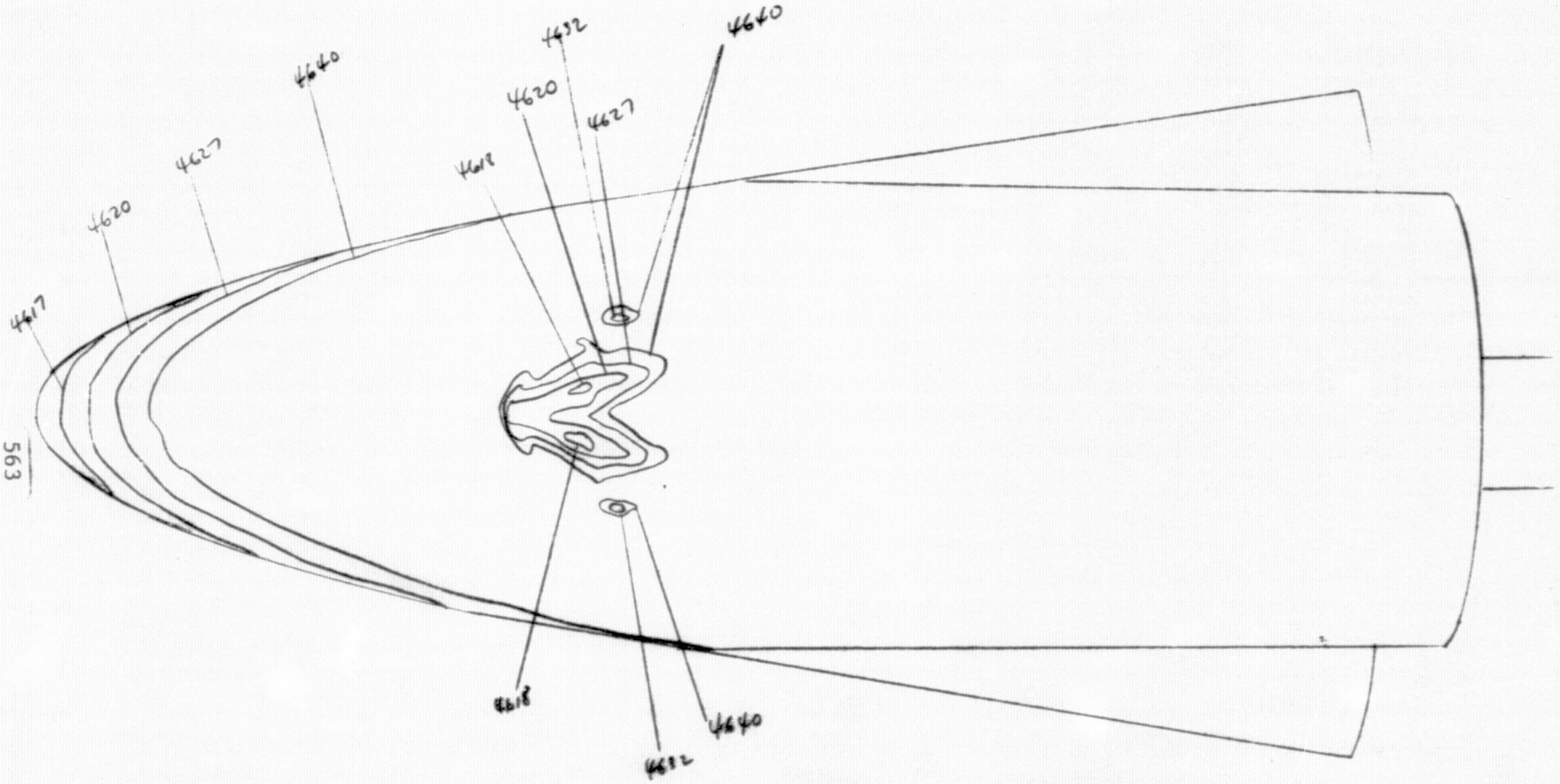
PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7498(275)	28.36	27.33	3.048E-03	.1335	3.916E-03	.1715	4.570E-03	.2002	2.506E-03
HOT 4609(131)	28.36	27.33	5.268E-04	.0231	6.449E-04	.0282	7.259E-04	.0318	4.365E-04
NOS 9109(131)	28.36	27.33	5.268E-04	.0231	6.449E-04	.0282	7.259E-04	.0318	4.365E-04
TOP 7499(275)	29.43	28.41	2.990E-03	.1309	3.841E-03	.1682	4.483E-03	.1963	2.457E-03
OS 2499(131)	29.43	28.41	5.168E-04	.0226	6.325E-04	.0277	7.120E-04	.0312	4.279E-04
HOT 4610(131)	29.43	28.41	5.168E-04	.0226	6.325E-04	.0277	7.120E-04	.0312	4.279E-04
NOS 9110(131)	29.43	28.41	5.168E-04	.0226	6.325E-04	.0277	7.120E-04	.0312	4.279E-04
TOP 7500(275)	30.54	29.51	2.934E-03	.1285	3.769E-03	.1651	4.398E-03	.1927	2.413E-03
OS 2500(131)	30.54	29.51	5.070E-04	.0222	6.206E-04	.0272	6.986E-04	.0306	4.203E-04
HOT 4611(131)	30.54	29.51	5.070E-04	.0222	6.206E-04	.0272	6.986E-04	.0306	4.203E-04
NOS 9111(131)	30.54	29.51	5.070E-04	.0222	6.206E-04	.0272	6.986E-04	.0306	4.203E-04
	30.99		MODEL WAS LEFT CENTERLINE						
TOP 7501(275)	31.61	30.59	2.892E-03	.1261	3.702E-03	.1621	4.320E-03	.1891	2.367E-03
OS 2501(131)	31.61	30.59	4.980E-04	.0218	6.096E-04	.0267	6.862E-04	.0300	4.122E-04
HOT 4612(131)	31.61	30.59	4.980E-04	.0218	6.096E-04	.0267	6.862E-04	.0300	4.122E-04
NOS 9112(131)	31.61	30.59	4.980E-04	.0218	6.096E-04	.0267	6.862E-04	.0300	4.122E-04
TOP 7502(275)	32.71	31.69	2.831E-03	.1241	3.637E-03	.1594	4.245E-03	.1860	2.330E-03
OS 2502(131)	32.71	31.69	4.893E-04	.0214	5.989E-04	.0262	6.742E-04	.0295	4.059E-04
HOT 4613(131)	32.71	31.69	4.893E-04	.0214	5.989E-04	.0262	6.742E-04	.0295	4.059E-04
NOS 9113(131)	32.71	31.69	4.893E-04	.0214	5.989E-04	.0262	6.742E-04	.0295	4.059E-04
TOP 7503(275)	33.79	32.76	2.784E-03	.1219	3.577E-03	.1566	4.174E-03	.1827	2.287E-03
OS 2503(131)	33.79	32.76	4.812E-04	.0211	5.890E-04	.0258	6.630E-04	.0290	3.984E-04
HOT 4614(131)	33.79	32.76	4.812E-04	.0211	5.890E-04	.0258	6.630E-04	.0290	3.984E-04
NOS 9114(131)	33.79	32.76	4.812E-04	.0211	5.890E-04	.0258	6.630E-04	.0290	3.984E-04



GROUP 50

α = 30

ψ = 0



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GROUP 50

α = 30

ψ = 0

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4/10/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VAS24 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTCH	ALPHA-PREHEND	ROLL-MODEL	YAW
50	0	7.98	424.7	1309	30.03	-.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
95.2	.044	1.971	3818	3.892E-05	7.674E-08	1.936E 06	2.293E-02	1.934E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAK)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	82	.0497	0	0
OP SIDE(OS)	7739	131	82	.0497	0	0
BOTTOM(BOT)	8176	131	82	.0497	0	0
TOP(TOP)	8197	225	82	.0541	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.910)	H(.910)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7506(225)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 2506(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
HOT 4615(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
NOS 9115(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
TOP 7505(225)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 2505(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HOT 4616(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NOS 9116(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.83								
TOP 7506(225)	2.18	1.15	9.794E-03	.4289	1.227E-02	.5373	1.405E-02	.6152	8.181E-03
OS 2506(131)	2.18	1.15	2.760E-03	.1209	3.367E-03	.1474	3.780E-03	.1655	2.317E-03
HOT 4617(131)	2.18	1.15	2.760E-03	.1209	3.367E-03	.1474	3.780E-03	.1655	2.317E-03
NOS 9117(131)	2.18	1.15	2.760E-03	.1209	3.367E-03	.1474	3.760E-03	.1655	2.317E-03
HOT 4618(131)	3.25	2.23	1.984E-03	.0869	2.421E-03	.1060	2.718E-03	.1190	1.666E-03
TOP 7507(225)	3.28	2.25	7.003E-03	.3066	8.772E-03	.3841	1.004E-02	.4398	5.846E-03
OS 2507(131)	3.28	2.25	1.973E-03	.0864	2.407E-03	.1054	2.703E-03	.1183	1.656E-03
NOS 9118(131)	3.28	2.25	1.973E-03	.0864	2.407E-03	.1054	2.703E-03	.1183	1.656E-03
TOP 7508(225)	4.36	3.33	5.761E-03	.2522	7.216E-03	.3160	8.263E-03	.3618	4.809E-03
OS 2508(131)	4.36	3.33	1.623E-03	.0711	1.980E-03	.0867	2.223E-03	.0973	1.362E-03
HOT 4619(131)	4.36	3.33	1.623E-03	.0711	1.980E-03	.0867	2.223E-03	.0973	1.362E-03
NOS 9119(131)	4.36	3.33	1.623E-03	.0711	1.980E-03	.0867	2.223E-03	.0973	1.362E-03
TOP 7509(225)	5.43	4.41	5.009E-03	.2193	6.273E-03	.2748	7.183E-03	.3146	4.184E-03
OS 2509(131)	5.43	4.41	1.411E-03	.0618	1.721E-03	.0754	1.933E-03	.0847	1.185E-03
HOT 4620(131)	5.46	4.43	1.407E-03	.0616	1.717E-03	.0752	1.927E-03	.0844	1.182E-03
NOS 9120(131)	5.46	4.43	1.407E-03	.0616	1.717E-03	.0752	1.927E-03	.0844	1.182E-03
TOP 7510(225)	6.53	5.51	4.479E-03	.1961	5.611E-03	.2456	6.425E-03	.2812	3.738E-03
OS 2510(131)	6.53	5.51	1.262E-03	.0552	1.540E-03	.0674	1.729E-03	.0757	1.059E-03
HOT 4621(131)	6.53	5.51	1.262E-03	.0552	1.540E-03	.0674	1.729E-03	.0757	1.059E-03
NOS 9121(131)	6.53	5.51	1.262E-03	.0552	1.540E-03	.0674	1.729E-03	.0757	1.059E-03

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9/10/74

NASA-RI OH60 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VAS26 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREREND	ROLL-MODEL	YAW
50	0	7.98	425.2	1309	30.03	-.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (R= .04 FT)	STREF (R= .04 FT)
95.3	.044	1.973	3818	3.896E-05	7.674E-08	1.539E 06	2.285E-02	1.933E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACAN)	THAR(TO)	BETA
NOR SIDE(NOS)	7576	131	92	.0497	6.386E-02	5.959E-02
UP SIDE(US)	7738	131	82	.0497	6.386E-02	5.959E-02
BOTTOM(BOT)	8176	131	82	.0497	6.386E-02	5.959E-02
TOP(TOP)	8197	225	82	.0541	7.864E-01	1.9629E-01

PIC NO	TIME	ELTIME	H(TO)	H(TO)/RREF	H(.9TO)	H(.9TO)/RREF	H(.912TO)	H(.912TO)/RREF	ST(TO)
TOP 7511(225)	7.61	6.58	4.697E-03	.1793	5.132E-03	.2246	5.876E-03	.2572	3.418E-03
US 2511(131)	7.63	6.61	1.152E-03	.0504	1.406E-03	.0615	1.578E-03	.0691	9.666E-04
BOT 4622(131)	7.63	6.61	1.152E-03	.0504	1.406E-03	.0615	1.578E-03	.0691	9.666E-04
NOS 9122(131)	7.63	6.61	1.152E-03	.0504	1.406E-03	.0615	1.578E-03	.0691	9.666E-04
TOP 7512(225)	8.71	7.68	3.792E-03	.1660	4.750E-03	.2079	5.439E-03	.2381	3.163E-03
US 2512(131)	8.71	7.68	1.168E-03	.0468	1.303E-03	.0570	1.463E-03	.0641	8.959E-04
BOT 4623(131)	8.71	7.68	1.168E-03	.0468	1.303E-03	.0570	1.463E-03	.0641	8.959E-04
NOS 9123(131)	8.71	7.68	1.168E-03	.0468	1.303E-03	.0570	1.463E-03	.0641	8.959E-04
TOP 7513(225)	9.81	8.79	3.544E-03	.1552	4.442E-03	.1944	5.087E-03	.2226	2.958E-03
US 2513(131)	9.81	8.79	9.993E-04	.0437	1.219E-03	.0534	1.369E-03	.0599	8.378E-04
BOT 4624(131)	9.81	8.79	9.993E-04	.0437	1.219E-03	.0534	1.369E-03	.0599	8.378E-04
NOS 9124(131)	9.81	8.79	9.993E-04	.0437	1.219E-03	.0534	1.369E-03	.0599	8.378E-04
BOT 4625(131)	10.89	9.86	9.432E-04	.0413	1.151E-03	.0503	1.292E-03	.0565	7.903E-04
TOP 7514(225)	10.91	9.89	3.343E-03	.1463	4.188E-03	.1832	4.795E-03	.2098	2.787E-03
US 2514(131)	10.91	9.89	9.420E-04	.0412	1.149E-03	.0503	1.290E-03	.0565	7.894E-04
NOS 9125(131)	10.91	9.89	9.420E-04	.0412	1.149E-03	.0503	1.290E-03	.0565	7.894E-04
TOP 7515(225)	11.99	10.96	3.175E-03	.1389	3.977E-03	.1740	4.554E-03	.1993	2.647E-03
US 2515(131)	11.99	10.96	8.945E-04	.0391	1.091E-03	.0477	1.225E-03	.0536	7.497E-04
BOT 4626(131)	11.99	10.96	8.945E-04	.0391	1.091E-03	.0477	1.225E-03	.0536	7.497E-04
NOS 9126(131)	11.99	10.96	8.945E-04	.0391	1.091E-03	.0477	1.225E-03	.0536	7.497E-04
TOP 7516(225)	13.09	12.06	3.026E-03	.1324	3.791E-03	.1659	4.341E-03	.1899	2.523E-03
US 2516(131)	13.09	12.06	8.527E-04	.0373	1.040E-03	.0455	1.168E-03	.0511	7.146E-04
BOT 4627(131)	13.09	12.06	8.527E-04	.0373	1.040E-03	.0455	1.168E-03	.0511	7.146E-04
NOS 9127(131)	13.09	12.06	8.527E-04	.0373	1.040E-03	.0455	1.168E-03	.0511	7.146E-04
TOP 7517(225)	14.17	13.14	2.900E-03	.1269	3.632E-03	.1590	4.159E-03	.1820	2.418E-03
US 2517(131)	14.17	13.14	8.171E-04	.0358	9.967E-04	.0436	1.119E-03	.0490	6.849E-04
BOT 4628(131)	14.17	13.14	8.171E-04	.0358	9.967E-04	.0436	1.119E-03	.0490	6.849E-04
NOS 9128(131)	14.17	13.14	8.171E-04	.0358	9.967E-04	.0436	1.119E-03	.0490	6.849E-04

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NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

VAS26

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
50	A	7.98	425.4	1309	30.03	-.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SIREF (R= .04 FT)
95.3	.044	1.974	3817	3.299E-05	7.672E-08	1.540E 06	2.285E-02	1.932F-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCAKK)	TRAR(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	82	.0497	6.786E-02	5.9595E-02
OP SIDE(OS)	7738	131	82	.0497	6.786E-02	5.9595E-02
BOTTOM(BOT)	8176	131	82	.0497	6.786E-02	5.9595E-02
TOP(TOP)	8197	225	82	.0541	1.864E-01	1.9429E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TC)	H(.9TC)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
TOP 7518(225)	15.27	14.24	2.785E-03	.1218	3.489E-03	.1526	3.935E-03	.1748	2.321E-03
OS 2519(131)	15.27	14.24	7.648E-04	.0343	9.574E-04	.0419	1.075E-03	.0470	6.574E-04
HOT 4629(131)	15.27	14.24	7.648E-04	.0343	9.574E-04	.0419	1.075E-03	.0470	6.574E-04
NOS 9129(131)	15.27	14.24	7.648E-04	.0343	9.574E-04	.0419	1.075E-03	.0470	6.574E-04
TOP 7519(225)	16.34	15.32	2.686E-03	.1175	3.360E-03	.1472	3.852E-03	.1686	2.239E-03
OS 2519(131)	16.34	15.32	7.368E-04	.0331	9.232E-04	.0404	1.037E-03	.0454	6.340E-04
HOT 4630(131)	16.34	15.32	7.368E-04	.0331	9.232E-04	.0404	1.037E-03	.0454	6.340E-04
NOS 9130(131)	16.34	15.32	7.368E-04	.0331	9.232E-04	.0404	1.037E-03	.0454	6.340E-04
TOP 7520(225)	17.45	16.42	2.594E-03	.1135	3.250E-03	.1422	3.721E-03	.1628	2.162E-03
OS 2520(131)	17.45	16.42	7.310E-04	.0320	8.917E-04	.0390	1.001E-03	.0438	6.124E-04
HOT 4631(131)	17.45	16.42	7.310E-04	.0320	8.917E-04	.0390	1.001E-03	.0438	6.124E-04
NOS 9131(131)	17.45	16.42	7.310E-04	.0320	8.917E-04	.0390	1.001E-03	.0438	6.124E-04
HOT 4632(131)	18.52	17.50	7.081E-04	.0310	8.638E-04	.0378	9.699E-04	.0424	5.931E-04
TOP 7521(225)	18.55	17.52	2.611E-03	.1095	3.140E-03	.1376	3.602E-03	.1576	2.093E-03
OS 2521(131)	18.55	17.52	7.076E-04	.0310	8.632E-04	.0378	9.692E-04	.0424	5.927E-04
NOS 9132(131)	18.55	17.52	7.076E-04	.0310	8.632E-04	.0378	9.692E-04	.0424	5.927E-04
TOP 7522(225)	19.62	18.60	2.437E-03	.1067	3.053E-03	.1336	3.496E-03	.1530	2.032E-03
OS 2522(131)	19.62	18.60	6.868E-04	.0301	8.376E-04	.0367	9.407E-04	.0412	5.756E-04
HOT 4633(131)	19.62	18.60	6.868E-04	.0301	8.376E-04	.0367	9.407E-04	.0412	5.756E-04
NOS 9133(131)	19.62	18.60	6.868E-04	.0301	8.376E-04	.0367	9.407E-04	.0412	5.756E-04
TOP 7523(225)	20.72	19.70	2.368E-03	.1036	2.967E-03	.1298	3.397E-03	.1486	1.973E-03
OS 2523(131)	20.72	19.70	6.674E-04	.0292	8.141E-04	.0356	9.140E-04	.0400	5.589E-04
HOT 4634(131)	20.72	19.70	6.674E-04	.0292	8.141E-04	.0356	9.140E-04	.0400	5.589E-04
NOS 9134(131)	20.72	19.70	6.674E-04	.0292	8.141E-04	.0356	9.140E-04	.0400	5.589E-04
TOP 7524(225)	21.80	20.77	2.304E-03	.1009	2.889E-03	.1264	3.308E-03	.1447	1.921E-03
OS 2524(131)	21.80	20.77	6.498E-04	.0284	7.927E-04	.0347	8.901E-04	.0389	5.441E-04
HOT 4635(131)	21.80	20.77	6.498E-04	.0284	7.927E-04	.0347	8.901E-04	.0389	5.441E-04
NOS 9135(131)	21.80	20.77	6.498E-04	.0284	7.927E-04	.0347	8.901E-04	.0389	5.441E-04

4/19/74

NASA-RI 0H50 AEDC(AHO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VAS26 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTCH	ALPHA-PREBEND	ROLL-MODEL	YAW
50	0	7.98	425.9	1309	30.03	-.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	XREF (R= .04 FT)	STREF (R= .04 FT)
95.3	.044	1.93E	3817	3.903E-05	7.672E-08	1.942E 06	2.286E-02	1.931F-02

CAMERA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXXMU)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	82	.0497	6.386E-02	5.9595E-02
UP SIDE(OS)	7730	131	82	.0497	6.386E-02	5.9595E-02
BOTTOM(BOT)	8176	131	82	.0497	6.386E-02	5.9595E-02
TOP(TOP)	8197	225	82	.0541	1.864F-01	1.9429E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/XREF	H(.9TO)	H(.9TO)/XREF	H(.912TO)	H(.912TO)/XREF	ST(TO)
TOP 7525(225)	22.98	21.88	2.247E-03	.0982	2.815E-03	.1231	3.224E-03	.1409	1.870E-03
OS 2525(131)	22.98	21.88	6.333E-04	.0277	7.725E-04	.0338	8.674E-04	.0379	5.296E-04
BOT 4636(131)	22.98	21.88	6.333E-04	.0277	7.725E-04	.0338	8.674E-04	.0379	5.296E-04
NOS 9134(131)	22.98	21.88	6.333E-04	.0277	7.725E-04	.0338	8.674E-04	.0379	5.296E-04
OS 2526(131)	23.98	22.95	6.182E-04	.0270	7.542E-04	.0330	8.468E-04	.0370	5.170E-04
BOT 4637(131)	23.98	22.95	6.182E-04	.0270	7.542E-04	.0330	8.468E-04	.0370	5.170E-04
NOS 9137(131)	23.98	22.95	6.182E-04	.0270	7.542E-04	.0330	8.468E-04	.0370	5.170E-04
TOP 7526(225)	24.00	22.98	2.193E-03	.0958	2.747E-03	.1200	3.145E-03	.1375	1.824E-03
TOP 7527(225)	25.08	24.05	2.143E-03	.0937	2.685E-03	.1174	3.074E-03	.1344	1.784E-03
OS 2527(131)	25.08	24.05	6.039E-04	.0264	7.367E-04	.0322	8.272E-04	.0362	5.054E-04
BOT 4638(131)	25.08	24.05	6.039E-04	.0264	7.367E-04	.0322	8.272E-04	.0362	5.054E-04
NOS 9138(131)	25.08	24.05	6.039E-04	.0264	7.367E-04	.0322	8.272E-04	.0362	5.054E-04
BOT 4639(131)	26.16	25.13	5.908E-04	.0258	7.208E-04	.0315	8.093E-04	.0354	4.942E-04
TOP 7528(225)	26.18	25.15	2.104E-03	.0916	2.625E-03	.1148	3.016E-03	.1315	1.745E-03
OS 2528(131)	26.18	25.15	5.906E-04	.0258	7.204E-04	.0315	8.089E-04	.0354	4.942E-04
NOS 9139(131)	26.18	25.15	5.906E-04	.0258	7.204E-04	.0315	8.089E-04	.0354	4.942E-04
TOP 7529(225)	27.26	26.23	2.052E-03	.0897	2.571E-03	.1124	2.944E-03	.1287	1.707E-03
OS 2529(131)	27.26	26.23	5.783E-04	.0253	7.055E-04	.0308	7.921E-04	.0346	4.835E-04
BOT 4640(131)	27.26	26.23	5.783E-04	.0253	7.055E-04	.0308	7.921E-04	.0346	4.835E-04
NOS 9140(131)	27.26	26.23	5.783E-04	.0253	7.055E-04	.0308	7.921E-04	.0346	4.835E-04
BOT 4641(131)	28.33	27.31	5.668E-04	.0250	6.914E-04	.0305	7.763E-04	.0342	4.637E-04
TOP 7530(225)	28.36	27.33	2.011E-03	.0896	2.519E-03	.1123	2.884E-03	.1286	1.582E-03
OS 2530(131)	28.36	27.33	5.665E-04	.0253	6.911E-04	.0308	7.760E-04	.0346	4.480E-04
NOS 9141(131)	28.36	27.33	5.665E-04	.0253	6.911E-04	.0308	7.760E-04	.0346	4.480E-04
TOP 7531(225)	29.43	28.41	1.972E-03	.0867	2.470E-03	.1086	2.829E-03	.1243	1.617E-03
OS 2531(131)	29.43	28.41	5.557E-04	.0244	6.779E-04	.0298	7.611E-04	.0334	4.579E-04
BOT 4642(131)	29.43	28.41	5.557E-04	.0244	6.779E-04	.0298	7.611E-04	.0334	4.579E-04
NOS 9142(131)	29.43	28.41	5.557E-04	.0244	6.779E-04	.0298	7.611E-04	.0334	4.579E-04

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4/10/74

NASA-RI OH60

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VAS26

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
50	0	7.98	426.3	1270	3F.03	-.03	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
92.5	.044	1.978	3706	4.026E-05	7.446E-08	2.033E 06	2.276E-02	1.896E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	THAR(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	82	.0497	6.386E-02	5.9595E-02
UP SIDE(OS)	7738	131	82	.0497	6.386E-02	5.9595E-02
BOTTOM(BOT)	8176	131	82	.0497	6.386E-02	5.9595E-02
TOF(TOF)	8197	225	82	.0541	1.864E-01	1.9429E-01

PIC NO	TIME DELTIME		H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.912TO)	H(.912TO)/HREF	ST(TO)
	30.31		MODEL HAS LEFT CENTERLINE						
TOF 7532(225)	30.54	29.51	1.735E-03	.0866	2.426E-03	.1059	2.776E-03	.1213	1.615E-03
OS 2532(131)	30.54	29.51	5.452E-04	.0238	6.651E-04	.0291	7.468E-04	.0326	4.573E-04
BOT 4643(131)	30.59	29.51	5.452E-04	.0238	6.651E-04	.0291	7.468E-04	.0326	4.573E-04
NOS 9143(131)	30.54	29.51	5.452E-04	.0238	6.651E-04	.0291	7.468E-04	.0326	4.573E-04

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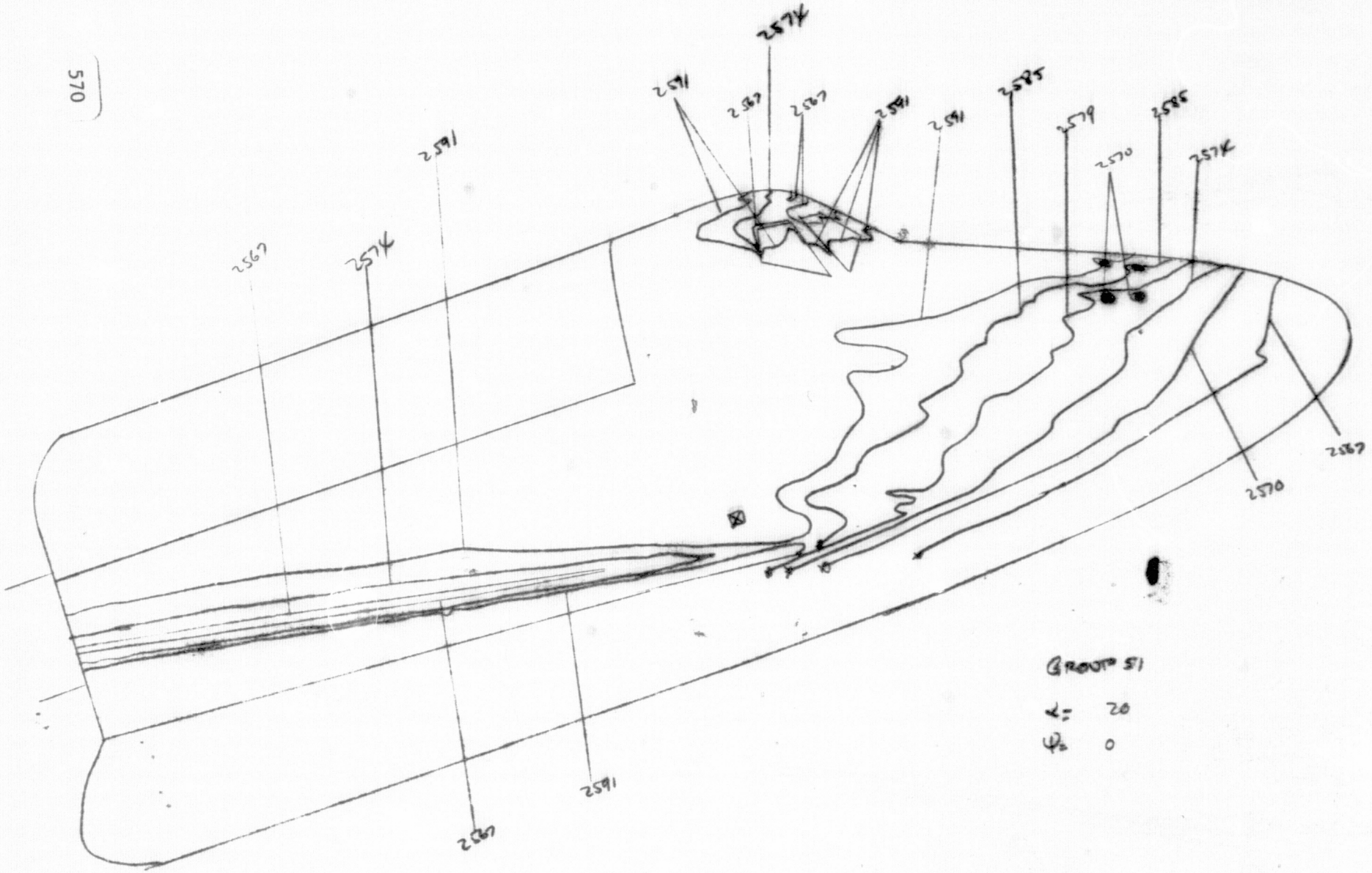
OH-3DA

GROUP 57
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$\psi = 0$

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

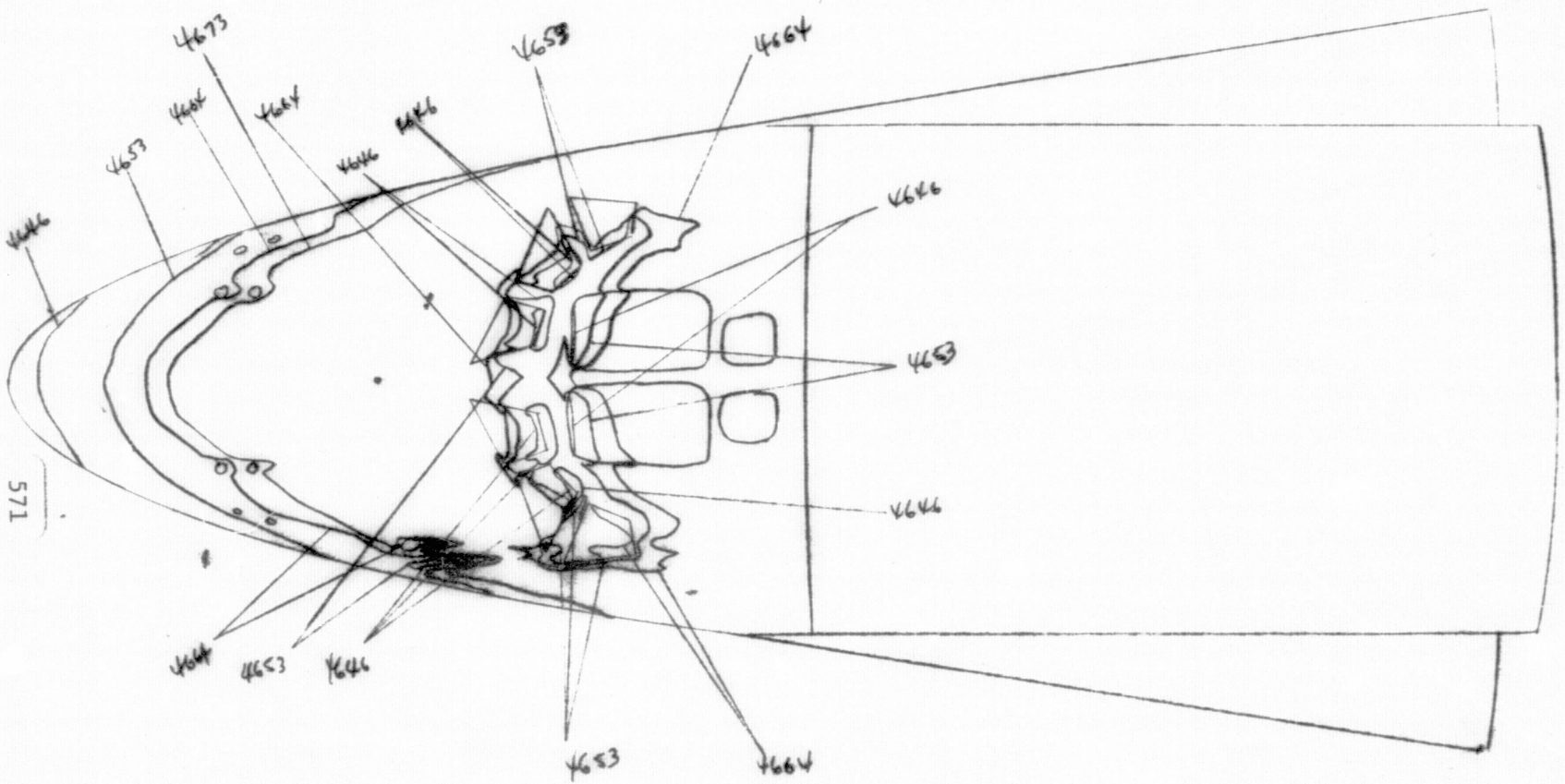
570



GROUP 51

α = 20

ψ_2 = 0



GROUP 51

$\alpha = 20$

$\psi = 0$

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

OH-50A

GROUP 57
$\alpha = 20$
$\psi = 0$

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

4/10/74

NASA-RI OH50 AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA52E 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
51	0	7.98	425.8	1297	20.00	10.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.044	1.476	3799	3.939E-05	7.601E-08	1.969E 06	2.282E-02	1.921E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXR)	TPAR(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	78	.0497	0	0
UP SIDE(US)	7606	131	78	.0497	0	0
HOTTOM(BOT)	8176	131	78	.0497	0	0
TOP(TOP)	7529	250	78	.0551	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TO 7564(250)	.03		MODEL HAS NOT REACHED CENTERLINE						
US 2564(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 4644(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 9144(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 7565(250)	1.10		MODEL HAS NOT REACHED CENTERLINE						
US 2565(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 4645(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 9145(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.6								
TOF 7566(250)	2.18	1.17	1.255E-02	.5500	1.591E-02	.6969	1.837E-02	.8047	1.040E-02
US 2566(131)	2.18	1.17	3.017E-03	.1322	3.683E-03	.1614	4.142E-03	.1814	2.515E-03
HOT 4646(131)	2.18	1.17	3.017E-03	.1322	3.683E-03	.1614	4.142E-03	.1814	2.515E-03
NOS 9146(131)	2.18	1.17	3.017E-03	.1322	3.683E-03	.1614	4.142E-03	.1814	2.515E-03
TOF 7567(250)	3.25	2.24	9.453E-03	.3966	1.147E-02	.5025	1.325E-02	.5803	7.499E-03
US 2567(131)	3.25	2.24	2.176E-03	.0953	2.656E-03	.1163	2.987E-03	.1308	1.814E-03
HOT 4647(131)	3.25	2.24	2.176E-03	.0953	2.656E-03	.1163	2.987E-03	.1308	1.814E-03
NOS 9147(131)	3.25	2.24	2.176E-03	.0953	2.656E-03	.1163	2.987E-03	.1308	1.814E-03
TOF 7568(250)	4.33	3.32	7.442E-03	.3260	9.430E-03	.4131	1.089E-02	.4770	6.164E-03
HOT 4648(131)	4.33	3.32	1.789E-03	.0783	2.183E-03	.0956	2.455E-03	.1075	1.491E-03
NOS 9148(131)	4.33	3.32	1.789E-03	.0783	2.183E-03	.0956	2.455E-03	.1075	1.491E-03
US 2568(131)	4.36	3.34	1.782E-03	.0780	2.175E-03	.0953	2.446E-03	.1071	1.485E-03
TOF 7569(250)	5.43	4.42	6.644E-03	.2825	8.171E-03	.3579	9.436E-03	.4133	5.341E-03
US 2569(131)	5.43	4.42	1.550E-03	.0679	1.892E-03	.0829	2.127E-03	.0932	1.292E-03
HOT 4649(131)	5.43	4.42	1.550E-03	.0679	1.892E-03	.0829	2.127E-03	.0932	1.292E-03
NOS 9149(131)	5.43	4.42	1.550E-03	.0679	1.892E-03	.0829	2.127E-03	.0932	1.292E-03
TOF 7570(250)	6.51	5.50	5.782E-03	.2533	7.326E-03	.3210	8.461E-03	.3707	4.789E-03
US 2570(131)	6.51	5.50	1.390E-03	.0609	1.697E-03	.0743	1.908E-03	.0836	1.158E-03
HOT 4650(131)	6.51	5.50	1.390E-03	.0609	1.697E-03	.0743	1.908E-03	.0836	1.158E-03
NOS 9150(131)	6.51	5.50	1.390E-03	.0609	1.697E-03	.0743	1.908E-03	.0836	1.158E-03

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4/10/74

NASA-RI OH50 — AEDC(AHO)(ACO) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

V4526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
51	0	7.98	426.0	1297	20.00	10.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	PE/FT (FT-1)	AREF (R= .04 FT)	SREF (R= .04 FT)
94.4	.044	1.977	3749	3.942E-05	7.599E-08	1.970E 06	2.283E-02	1.920F-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCAKK)	TRAR(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	78	.0497	6.985E-02	6.5546E-02
OP SIDE(OS)	7506	131	78	.0497	6.985E-02	6.5546E-02
BOTTOM(BOT)	8176	131	78	.0497	6.985E-02	6.5546E-02
TOP(TOP)	7929	250	78	.0551	2.767E-01	2.4602E-01

PIC NO	TIME	DELTIME	M(TO)	M(TO)/MREF	M(.9TO)	M(.9TO)/MREF	M(.892TO)	M(.892TO)/MREF	ST(TO)
HOT 4651(131)	7.58	6.57	1.271E-03	.0557	1.551E-03	.0680	1.744E-03	.0764	1.059E-03
TOF 7571(250)	7.61	6.60	5.278E-03	.2312	6.588E-03	.2930	7.723E-03	.3383	4.372E-03
OS 2571(131)	7.61	6.60	1.268E-03	.0556	1.548E-03	.0678	1.741E-03	.0763	1.058E-03
NOS 9151(131)	7.61	6.60	1.268E-03	.0556	1.548E-03	.0678	1.741E-03	.0763	1.058E-03
TOF 7572(250)	8.68	7.67	4.894E-03	.2142	6.201E-03	.2715	7.161E-03	.3135	4.049E-03
OS 2572(131)	8.68	7.67	1.176E-03	.0515	1.436E-03	.0629	1.614E-03	.0707	9.792E-04
HOT 4652(131)	8.68	7.67	1.176E-03	.0515	1.436E-03	.0629	1.614E-03	.0707	9.792E-04
NOS 9152(131)	8.68	7.67	1.176E-03	.0515	1.436E-03	.0629	1.614E-03	.0707	9.792E-04
TOF 7573(250)	9.76	8.75	4.588E-03	.2007	5.807E-03	.2544	6.706E-03	.2937	3.795E-03
OS 2573(131)	9.76	8.75	1.101E-03	.0482	1.345E-03	.0589	1.512E-03	.0662	9.178E-04
HOT 4653(131)	9.76	8.75	1.101E-03	.0482	1.345E-03	.0589	1.512E-03	.0662	9.178E-04
NOS 9153(131)	9.76	8.75	1.101E-03	.0482	1.345E-03	.0589	1.512E-03	.0662	9.178E-04
HOT 4654(131)	10.84	9.83	4.039E-03	.0455	1.269E-03	.0556	1.427E-03	.0625	8.657E-04
TOF 7574(250)	10.86	9.85	4.319E-03	.1891	5.473E-03	.2396	9.320E-03	.2767	3.574E-03
OS 2574(131)	10.86	9.85	1.038E-03	.0454	1.267E-03	.0555	1.425E-03	.0624	8.644E-04
NOS 9154(131)	10.86	9.85	1.038E-03	.0454	1.267E-03	.0555	1.425E-03	.0624	8.644E-04
TOF 7575(250)	11.94	10.93	4.101E-03	.1796	5.197E-03	.2276	6.001E-03	.2628	3.395E-03
OS 2575(131)	11.94	10.93	9.855E-04	.0432	1.203E-03	.0527	1.353E-03	.0592	8.211E-04
HOT 4655(131)	11.94	10.93	9.855E-04	.0432	1.203E-03	.0527	1.353E-03	.0592	8.211E-04
NOS 9155(131)	11.94	10.93	9.855E-04	.0432	1.203E-03	.0527	1.353E-03	.0592	8.211E-04
TOF 7576(250)	13.01	12.00	3.413E-03	.1713	4.956E-03	.2171	5.725E-03	.2507	3.238E-03
OS 2576(131)	13.01	12.00	9.003E-04	.0412	1.148E-03	.0503	1.291E-03	.0565	7.831E-04
HOT 4656(131)	13.01	12.00	9.003E-04	.0412	1.148E-03	.0503	1.291E-03	.0565	7.831E-04
NOS 9156(131)	13.01	12.00	9.003E-04	.0412	1.148E-03	.0503	1.291E-03	.0565	7.831E-04
TOF 7577(250)	14.09	13.08	3.749E-03	.1642	4.750E-03	.2081	5.485E-03	.2403	3.104E-03

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4/10/74

NASA-PT 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
51	0	7.98	426.0	1297	20.00	10.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (H= .04 FT)	SIREF (H= .04 FT)
94.4	.044	1.977	3799	3.942E-05	7.599E-08	1.970E 06	2.283E-02	1.920E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACK)	TRAR(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	78	.0497	6.985E-02	6.5546E-02
OP SIDE(OS)	7506	131	78	.0497	6.985E-02	6.5546E-02
BOTTOM(BOT)	8176	131	78	.0497	6.985E-02	6.5546E-02
TOP(TOP)	7529	250	78	.0551	2.767E-01	2.4602E-01

PIC NO	TIME	DELTIME	M(IO)	M(IO)/MREF	M(.9IO)	M(.9IO)/MREF	M(.892TO)	M(.892IO)/MREF	ST(IO)
NOT 4651(131)	.68	6.67	1.271E-03	.0557	1.551E-03	.0680	1.744E-03	.0764	1.059E-03
TOP 7571(250)	7.61	6.60	5.278E-03	.2312	6.686E-03	.2930	7.723E-03	.3383	4.372E-03
OS 2571(131)	7.61	6.60	1.268E-03	.0556	1.548E-03	.0678	1.741E-03	.0763	1.058E-03
NOS 5151(131)	7.61	6.60	1.268E-03	.0556	1.548E-03	.0678	1.741E-03	.0763	1.058E-03
TOF 7572(250)	8.68	7.67	4.804E-03	.2142	5.201E-03	.2715	7.161E-03	.3135	4.049E-03
OS 2572(131)	8.68	7.67	1.176E-03	.0515	1.436E-03	.0629	1.614E-03	.0707	9.792E-04
NOT 4652(131)	8.68	7.67	1.176E-03	.0515	1.436E-03	.0629	1.614E-03	.0707	9.792E-04
NOS 5152(131)	8.68	7.67	1.176E-03	.0515	1.436E-03	.0629	1.614E-03	.0707	9.792E-04
TOF 7573(250)	9.76	8.75	4.783E-03	.2097	5.607E-03	.2544	6.706E-03	.2937	3.795E-03
OS 2573(131)	9.76	8.75	1.101E-03	.0482	1.345E-03	.0589	1.512E-03	.0662	9.178E-04
NOT 4653(131)	9.76	8.75	1.101E-03	.0482	1.345E-03	.0589	1.512E-03	.0662	9.178E-04
NOS 5153(131)	9.76	8.75	1.101E-03	.0482	1.345E-03	.0589	1.512E-03	.0662	9.178E-04
NOT 4654(131)	10.84	9.83	1.038E-03	.0455	1.269E-03	.0556	1.427E-03	.0625	8.657E-04
TOF 7574(250)	10.86	9.85	4.319E-03	.1891	5.473E-03	.2396	6.320E-03	.2767	3.574E-03
OS 2574(131)	10.86	9.85	1.038E-03	.0454	1.267E-03	.0555	1.425E-03	.0624	8.644E-04
NOS 5154(131)	10.86	9.85	1.038E-03	.0454	1.267E-03	.0555	1.425E-03	.0624	8.644E-04
TOF 7575(250)	11.94	10.93	4.101E-03	.1796	5.197E-03	.2276	6.001E-03	.2628	3.395E-03
OS 2575(131)	11.94	10.93	9.655E-04	.0432	1.203E-03	.0527	1.393E-03	.0592	8.211E-04
NOT 4655(131)	11.94	10.93	9.655E-04	.0432	1.203E-03	.0527	1.393E-03	.0592	8.211E-04
NOS 5155(131)	11.94	10.93	9.655E-04	.0432	1.203E-03	.0527	1.393E-03	.0592	8.211E-04
TOF 7576(250)	13.01	12.00	3.913E-03	.1713	4.958E-03	.2171	5.725E-03	.2507	3.239E-03
OS 2576(131)	13.01	12.00	9.403E-04	.0412	1.148E-03	.0503	1.341E-03	.0565	7.831E-04
NOT 4656(131)	13.01	12.00	9.403E-04	.0412	1.148E-03	.0503	1.341E-03	.0565	7.831E-04
NOS 5156(131)	13.01	12.00	9.403E-04	.0412	1.148E-03	.0503	1.341E-03	.0565	7.831E-04
TOF 7577(250)	14.09	13.08	3.749E-03	.1642	4.750E-03	.2081	5.485E-03	.2403	3.104E-03

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NASA-RI OH50 AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VASPA 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREHEND	ROLL-MODEL	YAW
51	0	7.98	426.0	1296	20.00	10.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	ML-INF (LB-SEC/FT3)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.044	1.977	3794	3.942E-05	7.594E-03	1.571E 06	2.283E-02	1.920E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	78	.0497	6.955E-02	6.5546E-02
OP SIDE(OS)	7606	131	78	.0497	6.955E-02	6.5546E-02
BOTTOM(BOT)	8176	131	78	.0497	6.955E-02	6.5546E-02
TOP(TOP)	7929	250	78	.0551	2.267E-01	2.4602E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
OS 2577(131)	14.12	13.10	8.999E-04	.0394	1.099E-03	.0481	1.235E-03	.0541	7.495E-04
BOT 4657(131)	14.12	13.10	8.999E-04	.0394	1.099E-03	.0481	1.235E-03	.0541	7.495E-04
NOS 8157(131)	14.12	13.10	8.999E-04	.0394	1.099E-03	.0481	1.235E-03	.0541	7.495E-04
TOP 7578(250)	15.19	14.18	3.800E-03	.1577	4.562E-03	.1999	5.268E-03	.2308	2.982E-03
OS 2578(131)	15.19	14.18	8.651E-04	.0379	1.056E-03	.0463	1.148E-03	.0529	7.213E-04
BOT 4658(131)	15.19	14.18	8.651E-04	.0379	1.056E-03	.0463	1.148E-03	.0529	7.213E-04
NOS 8158(131)	15.19	14.18	8.651E-04	.0379	1.056E-03	.0463	1.148E-03	.0529	7.213E-04
TOP 7579(250)	16.27	15.26	3.470E-03	.1519	4.398E-03	.1925	5.078E-03	.2223	2.870E-03
OS 2579(131)	16.27	15.26	8.340E-04	.0365	1.018E-03	.0446	1.145E-03	.0501	6.940E-04
BOT 4659(131)	16.27	15.26	8.340E-04	.0365	1.018E-03	.0446	1.145E-03	.0501	6.940E-04
NOS 8159(131)	16.27	15.26	8.340E-04	.0365	1.018E-03	.0446	1.145E-03	.0501	6.940E-04
TOP 7580(250)	17.37	16.36	3.352E-03	.1468	4.247E-03	.1860	4.904E-03	.2148	2.775E-03
OS 2580(131)	17.37	16.36	8.054E-04	.0353	9.833E-04	.0431	1.106E-03	.0484	6.712E-04
BOT 4660(131)	17.37	16.36	8.054E-04	.0353	9.833E-04	.0431	1.106E-03	.0484	6.712E-04
NOS 8160(131)	17.37	16.36	8.054E-04	.0353	9.833E-04	.0431	1.106E-03	.0484	6.712E-04
TOP 7581(250)	18.45	17.43	3.247E-03	.1422	4.114E-03	.1801	4.751E-03	.2080	2.686E-03
OS 2581(131)	18.45	17.43	7.802E-04	.0342	9.525E-04	.0417	1.071E-03	.0469	6.497E-04
BOT 4661(131)	18.45	17.43	7.802E-04	.0342	9.525E-04	.0417	1.071E-03	.0469	6.497E-04
NOS 8161(131)	18.45	17.43	7.802E-04	.0342	9.525E-04	.0417	1.071E-03	.0469	6.497E-04
BOT 4662(131)	19.52	18.51	7.472E-04	.0327	9.249E-04	.0405	1.039E-03	.0455	6.305E-04
TOP 7582(250)	19.55	18.54	3.149E-03	.1379	3.990E-03	.1747	4.607E-03	.2017	2.605E-03
OS 2582(131)	19.55	18.54	7.567E-04	.0331	9.238E-04	.0404	1.039E-03	.0455	6.301E-04
NOS 8162(131)	19.55	18.54	7.567E-04	.0331	9.238E-04	.0404	1.039E-03	.0455	6.301E-04
TOP 7583(250)	20.62	19.61	3.161E-03	.1340	3.879E-03	.1699	4.479E-03	.1962	2.533E-03
OS 2583(131)	20.62	19.61	7.356E-04	.0322	8.981E-04	.0393	1.010E-03	.0442	6.127E-04
BOT 4663(131)	20.62	19.61	7.356E-04	.0322	8.981E-04	.0393	1.010E-03	.0442	6.127E-04
NOS 8163(131)	20.62	19.61	7.356E-04	.0322	8.981E-04	.0393	1.010E-03	.0442	6.127E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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4/10/74

NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

RNCVE	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTCH	ALPHA-PREBEND	ROLL-MODEL	YAW
51	0	7.98	426.3	1256	20.00	10.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RH)-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.044	1.97E	3795	3.946E-05	7.897E-08	1.973E 06	7.894E-02	1.919E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHCACAK)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	78	.0497	6.985E-02	6.5546E-02
OP SIDE(OS)	7906	131	78	.0497	6.985E-02	6.5546E-02
BOTTOM(BOT)	8176	131	78	.0497	6.985E-02	6.5546E-02
TOP(TOP)	7529	250	78	.0551	2.767E-01	2.4602E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 7584(250)	21.70	20.69	2.498E-03	.1305	3.777E-03	.1654	6.361E-03	.1910	2.466E-03
OS 2584(131)	21.70	20.69	7.162E-04	.0314	9.744E-04	.0383	9.832E-04	.0431	5.966E-04
NOT 4664(131)	21.70	20.69	7.162E-04	.0314	9.744E-04	.0383	9.832E-04	.0431	5.966E-04
NOS 5164(131)	21.70	20.69	7.162E-04	.0314	9.744E-04	.0383	9.832E-04	.0431	5.966E-04
TOP 7585(250)	22.80	21.79	2.604E-03	.1272	3.680E-03	.1412	4.249E-03	.1461	2.404E-03
OS 2585(131)	22.80	21.79	6.979E-04	.0306	8.520E-04	.0373	9.580E-04	.0420	5.814E-04
NOT 4665(131)	22.80	21.79	6.979E-04	.0306	8.520E-04	.0373	9.580E-04	.0420	5.814E-04
NOS 5165(131)	22.80	21.79	6.979E-04	.0306	8.520E-04	.0373	9.580E-04	.0420	5.814E-04
TOP 7586(250)	23.88	22.87	2.735E-03	.1242	3.592E-03	.1574	4.148E-03	.1817	2.348E-03
OS 2586(131)	23.88	22.87	6.713E-04	.0298	8.317E-04	.0364	9.352E-04	.0410	5.680E-04
NOT 4666(131)	23.88	22.87	6.713E-04	.0298	8.317E-04	.0364	9.352E-04	.0410	5.680E-04
NOS 5166(131)	23.88	22.87	6.713E-04	.0298	8.317E-04	.0364	9.352E-04	.0410	5.680E-04
NOT 4667(131)	24.95	23.94	6.559E-04	.0291	8.128E-04	.0356	9.139E-04	.0400	5.541E-04
TOP 7587(250)	24.98	23.97	2.769E-03	.1212	3.509E-03	.1536	4.052E-03	.1774	2.291E-03
OS 2587(131)	24.98	23.97	6.654E-04	.0291	8.124E-04	.0356	9.135E-04	.0400	5.541E-04
NOS 5167(131)	24.98	23.97	6.654E-04	.0291	8.124E-04	.0356	9.135E-04	.0400	5.541E-04
TOP 7588(250)	26.05	25.04	2.709E-03	.1186	3.433E-03	.1503	3.980E-03	.1736	2.242E-03
OS 2588(131)	26.05	25.04	6.510E-04	.0285	7.947E-04	.0348	8.936E-04	.0391	5.423E-04
NOT 4668(131)	26.05	25.04	6.510E-04	.0285	7.947E-04	.0348	8.936E-04	.0391	5.423E-04
NOS 5168(131)	26.05	25.04	6.510E-04	.0285	7.947E-04	.0348	8.936E-04	.0391	5.423E-04
TOP 7589(250)	27.13	26.12	2.652E-03	.1161	3.361E-03	.1472	3.881E-03	.1699	2.194E-03
OS 2589(131)	27.13	26.12	6.374E-04	.0279	7.782E-04	.0341	8.750E-04	.0383	5.306E-04
NOT 4669(131)	27.13	26.12	6.374E-04	.0279	7.782E-04	.0341	8.750E-04	.0383	5.306E-04
NOS 5169(131)	27.13	26.12	6.374E-04	.0279	7.782E-04	.0341	8.750E-04	.0383	5.306E-04
TOP 7590(250)	28.23	27.22	2.599E-03	.1137	3.293E-03	.1441	3.802E-03	.1664	2.148E-03
OS 2590(131)	28.23	27.22	6.244E-04	.0273	7.623E-04	.0334	8.571E-04	.0375	5.196E-04
NOT 4670(131)	28.23	27.22	6.244E-04	.0273	7.623E-04	.0334	8.571E-04	.0375	5.196E-04
NOS 5170(131)	28.23	27.22	6.244E-04	.0273	7.623E-04	.0334	8.571E-04	.0375	5.196E-04

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NASA-RI ONSO

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

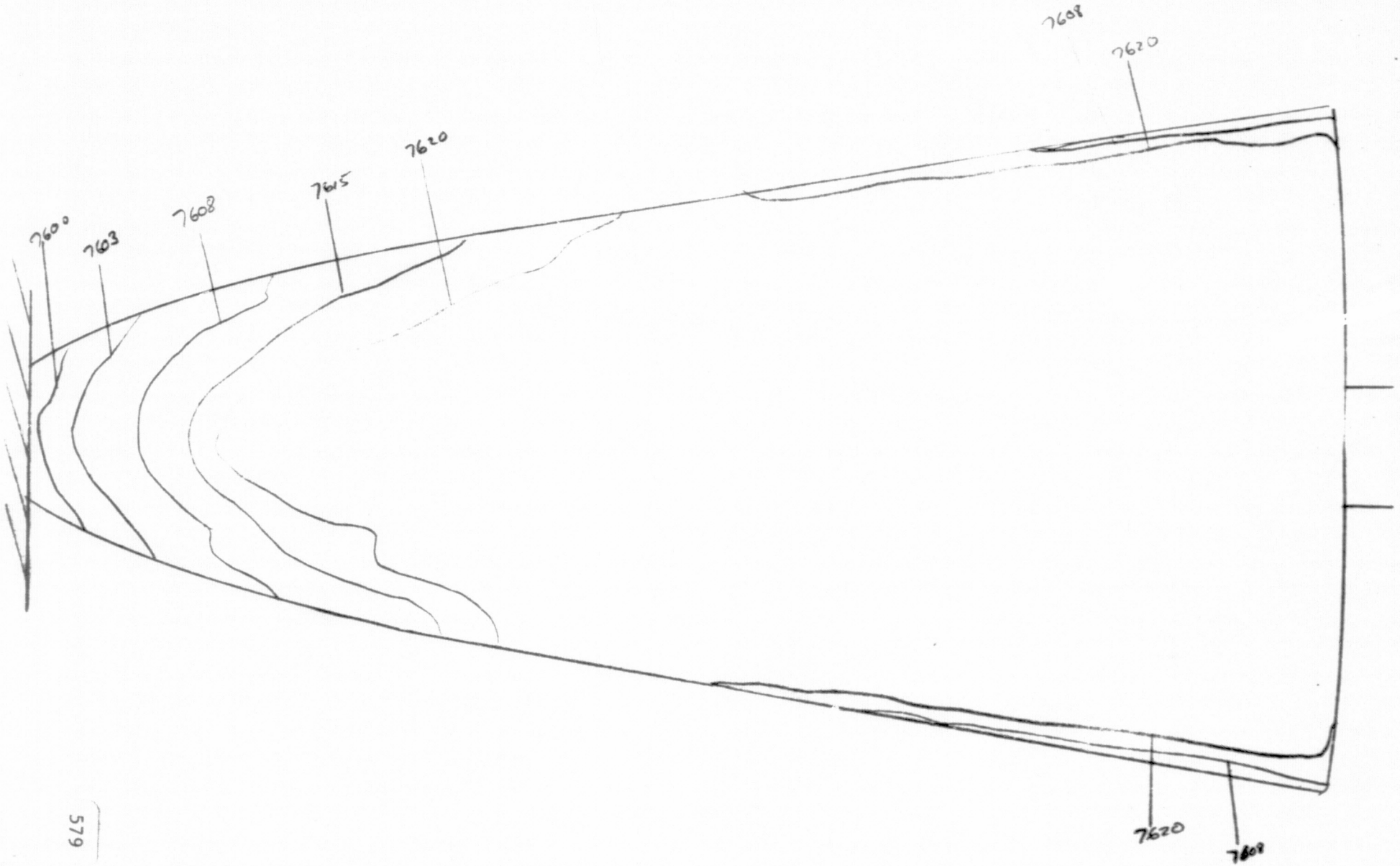
VA52E

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PRESEND	ROLL-MODEL	YAW
51	0	7.98	425.7	1296	20.00	10.00	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.044	1.940	3746	3.950E-05	7.540E-08	1.075E 06	2.285E-02	1.918E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	78	.0497	6.985E-02	6.5546E-02
OP SIDE(OS)	7906	131	78	.0497	6.985E-02	6.5546E-02
BOTTOM(BOT)	8176	131	78	.0497	6.985E-02	6.5546E-02
TOP(TOP)	7929	250	78	.0551	2.267E-01	2.4602E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.8921O)/HREF	ST(TO)
TOP 7591(250)	29.31	28.30	2.584E-03	.1116	3.229E-03	.1414	3.729E-03	.1633	2.109E-03
OS 2591(131)	29.31	28.30	6.124E-04	.0268	7.477E-04	.0327	8.407E-04	.0368	5.102E-04
BOT 4671(131)	29.31	28.30	6.124E-04	.0268	7.477E-04	.0327	8.407E-04	.0368	5.102E-04
NOS 5171(131)	29.31	28.30	6.124E-04	.0268	7.477E-04	.0327	8.407E-04	.0368	5.102E-04
BOT 4672(131)	30.38	29.37	6.011E-04	.0263	7.338E-04	.0321	8.251E-04	.0361	5.006E-04
TOP 7592(250)	30.41	29.40	2.500E-03	.1095	3.168E-03	.1387	3.658E-03	.1602	2.068E-03
OS 2592(131)	30.41	29.40	6.008E-04	.0263	7.335E-04	.0321	8.248E-04	.0361	5.003E-04
NOS 5172(131)	30.41	29.40	6.008E-04	.0263	7.335E-04	.0321	8.248E-04	.0361	5.003E-04
TOP 7593(250)	31.49	30.47	2.456E-03	.1075	3.112E-03	.1362	3.543E-03	.1573	2.031E-03
OS 2593(131)	31.49	30.47	5.401E-04	.0258	7.204E-04	.0315	8.101E-04	.0355	4.911E-04
BOT 4673(131)	31.49	30.47	5.401E-04	.0258	7.204E-04	.0315	8.101E-04	.0355	4.911E-04
NOS 5173(131)	31.49	30.47	5.401E-04	.0258	7.204E-04	.0315	8.101E-04	.0355	4.911E-04
	31.81		MODEL HAS LEFT CENTERLINE						
TOP 7594(250)	32.56	31.55	2.413E-03	.1057	3.058E-03	.1339	3.531E-03	.1546	1.996E-03
OS 2594(131)	32.56	31.55	5.800E-04	.0254	7.081E-04	.0310	7.961E-04	.0349	4.828E-04
BOT 4674(131)	32.56	31.55	5.800E-04	.0254	7.081E-04	.0310	7.961E-04	.0349	4.828E-04
NOS 5174(131)	32.56	31.55	5.800E-04	.0254	7.081E-04	.0310	7.961E-04	.0349	4.828E-04
TOP 7595(250)	33.66	32.65	2.372E-03	.1039	3.006E-03	.1316	3.471E-03	.1520	1.963E-03
OS 2595(131)	33.66	32.65	5.701E-04	.0250	6.960E-04	.0305	7.826E-04	.0343	4.747E-04
BOT 4675(131)	33.66	32.65	5.701E-04	.0250	6.960E-04	.0305	7.826E-04	.0343	4.747E-04
NOS 5175(131)	33.66	32.65	5.701E-04	.0250	6.960E-04	.0305	7.826E-04	.0343	4.747E-04

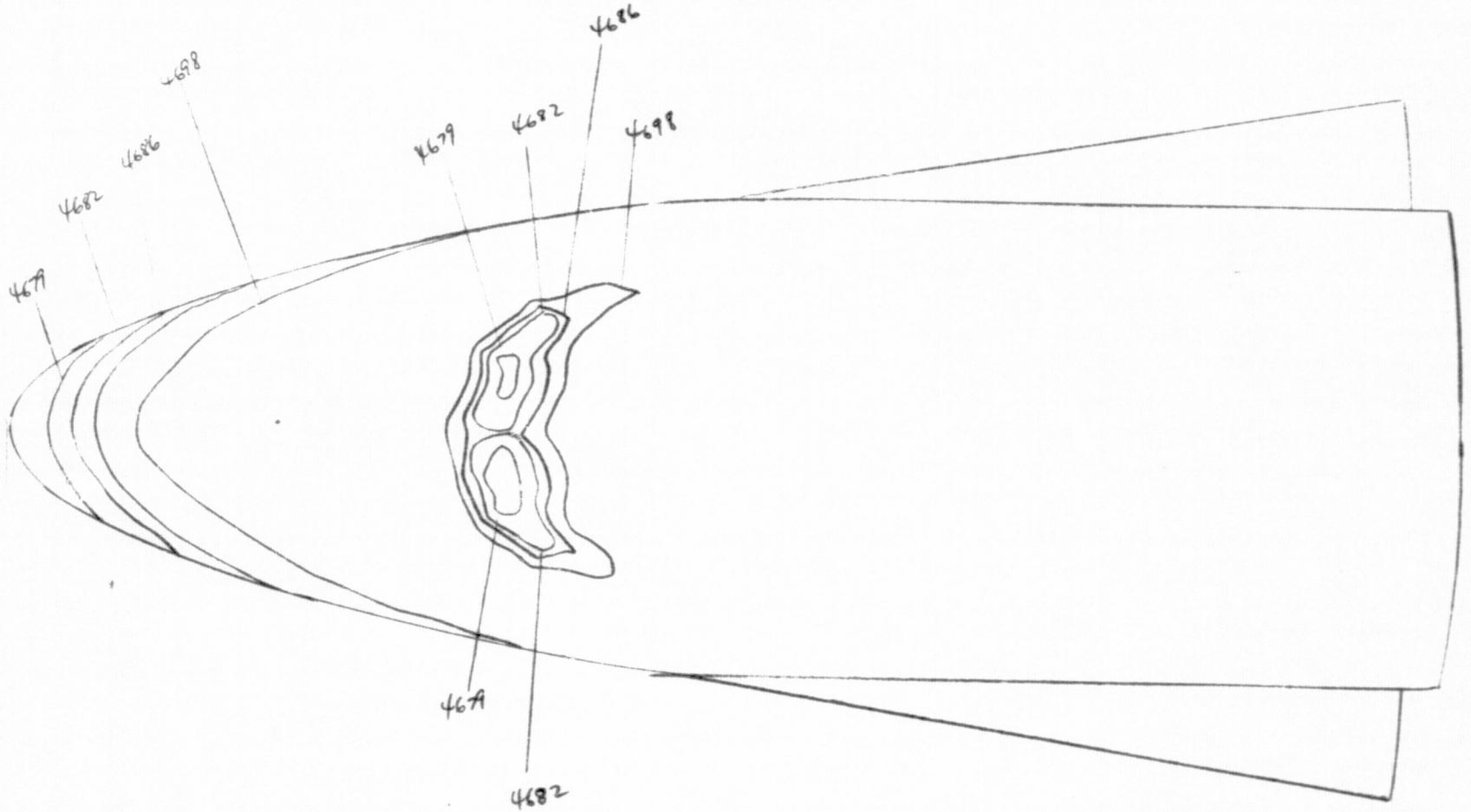


GROUP 52
$\alpha = 20$
$\psi = 0$

AVAILABILITY OF THE

580

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



GROUP 52

$\alpha = 20$

$\psi = 0$

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4/10/74

NASA-RT OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA52E

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
52	0	7.98	425.2	1286	19.96	10.06	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (H= .04 FT)	SREF (H= .04 FT)
93.6	.044	1.973	3784	3.966E-05	7.538E-02	1.891E 06	2.27BE-02	1.912F-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAR)	TRAP(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	79	.0497	0	0
OP SIDE(OS)	7506	131	79	.0497	0	0
BOTTOM(BOT)	8176	131	79	.0497	0	0
TOP(TOP)	7629	225	79	.0541	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TO 7598(225)	.63		MODEL HAS NOT REACHED CENTERLINE						
OS 2596(131)	.63		MODEL HAS NOT REACHED CENTERLINE						
NO 4676(131)	.63		MODEL HAS NOT REACHED CENTERLINE						
NO 9176(131)	.63		MODEL HAS NOT REACHED CENTERLINE						
TO 7597(225)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 2597(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 4677(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 9177(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.78								
TOF 7598(225)	2.18	1.18	1.024E-02	.4692	1.288E-02	.5454	1.490E-02	.6496	8.468E-03
OS 2598(131)	2.18	1.18	2.986E-03	.1310	3.654E-03	.1603	4.112E-03	.1805	2.483E-03
NOT 4678(131)	2.18	1.18	2.986E-03	.1310	3.654E-03	.1603	4.112E-03	.1805	2.483E-03
NOS 9178(131)	2.18	1.18	2.986E-03	.1310	3.654E-03	.1603	4.112E-03	.1805	2.483E-03
TOF 7599(225)	3.25	2.26	7.402E-03	.3249	9.317E-03	.4089	1.070E-02	.4697	6.124E-03
OS 2599(131)	3.25	2.26	2.159E-03	.0948	2.642E-03	.1160	2.973E-03	.1305	1.796E-03
NOT 4679(131)	3.25	2.26	2.159E-03	.0948	2.642E-03	.1160	2.973E-03	.1305	1.796E-03
NOS 9179(131)	3.25	2.26	2.159E-03	.0948	2.642E-03	.1160	2.973E-03	.1305	1.796E-03
TOF 7600(225)	4.36	3.36	6.068E-03	.2663	7.637E-03	.3352	8.773E-03	.3850	5.020E-03
OS 2600(131)	4.36	3.36	1.770E-03	.0777	2.168E-03	.0951	2.438E-03	.1070	1.472E-03
NOT 4680(131)	4.36	3.36	1.770E-03	.0777	2.166E-03	.0951	2.438E-03	.1070	1.472E-03
NOS 9180(131)	4.36	3.36	1.770E-03	.0777	2.160E-03	.0951	2.438E-03	.1070	1.472E-03
TOF 7601(225)	5.43	4.43	5.288E-03	.2317	6.646E-03	.2917	7.634E-03	.3350	4.368E-03
OS 2601(131)	5.43	4.43	1.540E-03	.0676	1.885E-03	.0827	2.121E-03	.0931	1.281E-03
NOT 4681(131)	5.43	4.43	1.540E-03	.0676	1.885E-03	.0827	2.121E-03	.0931	1.281E-03
NOS 9181(131)	5.43	4.43	1.540E-03	.0676	1.885E-03	.0827	2.121E-03	.0931	1.281E-03
TOF 7602(225)	6.53	5.53	4.728E-03	.2073	5.948E-03	.2610	6.832E-03	.2998	3.908E-03
OS 2602(131)	6.53	5.53	1.379E-03	.0605	1.687E-03	.0740	1.898E-03	.0833	1.146E-03
NOT 4682(131)	6.53	5.53	1.379E-03	.0605	1.687E-03	.0740	1.898E-03	.0833	1.146E-03
NOS 9182(131)	6.53	5.53	1.379E-03	.0605	1.687E-03	.0740	1.898E-03	.0833	1.146E-03

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4/10/74

NASA-HI OHEO — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VAS2E — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
52	9	7.98	425.8	1286	19.96	10.04	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (RE= .04 FT)	STREF (RE= .04 FT)
93.6	.016	1.976	3756	3.972E-05	7.538E-08	1.894E 06	2.279E-02	1.911E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACKK)	TPAR(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	79	.0497	6.960E-02	6.5260E-02
OP SIDE(OS)	7906	131	79	.0497	6.960E-02	6.5260E-02
BOTTOM(BOT)	8176	131	79	.0497	6.960E-02	6.5260E-02
TOP(TOP)	7929	225	79	.0541	1.054E-01	2.0551E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOP 7603(225)	7.61	6.61	4.024E-03	.1897	5.442E-03	.2387	6.252E-03	.2742	3.574E-03
OS 2603(131)	7.61	6.61	1.261E-03	.0553	1.543E-03	.0677	1.737E-03	.0762	1.048E-03
BOT 4683(131)	7.61	6.61	1.261E-03	.0553	1.543E-03	.0677	1.737E-03	.0762	1.048E-03
NOS 5183(131)	7.61	6.61	1.261E-03	.0553	1.543E-03	.0677	1.737E-03	.0762	1.048E-03
TOP 7604(225)	8.71	7.71	4.003E-03	.1757	5.039E-03	.2211	5.788E-03	.2540	3.311E-03
OS 2604(131)	8.71	7.71	1.168E-03	.0512	1.429E-03	.0627	1.604E-03	.0706	9.707E-04
BOT 4684(131)	8.71	7.71	1.168E-03	.0512	1.429E-03	.0627	1.604E-03	.0706	9.707E-04
NOS 5184(131)	8.71	7.71	1.168E-03	.0512	1.429E-03	.0627	1.604E-03	.0706	9.707E-04
TOP 7605(225)	9.79	8.79	3.750E-03	.1646	4.720E-03	.2072	5.422E-03	.2380	3.105E-03
OS 2605(131)	9.79	8.79	1.094E-03	.0480	1.339E-03	.0588	1.507E-03	.0661	9.104E-04
BOT 4685(131)	9.79	8.79	1.094E-03	.0480	1.339E-03	.0588	1.507E-03	.0661	9.104E-04
NOS 5185(131)	9.79	8.79	1.094E-03	.0480	1.339E-03	.0588	1.507E-03	.0661	9.104E-04
TOP 7606(225)	10.89	9.89	3.535E-03	.1551	4.450E-03	.1952	5.111E-03	.2242	2.923E-03
OS 2606(131)	10.89	9.89	1.031E-03	.0452	1.262E-03	.0554	1.420E-03	.0623	8.570E-04
BOT 4686(131)	10.89	9.89	1.031E-03	.0452	1.262E-03	.0554	1.420E-03	.0623	8.570E-04
NOS 5186(131)	10.89	9.89	1.031E-03	.0452	1.262E-03	.0554	1.420E-03	.0623	8.570E-04
TOP 7607(225)	11.96	10.97	3.357E-03	.1472	4.226E-03	.1853	4.854E-03	.2128	2.772E-03
OS 2607(131)	11.96	10.97	9.794E-04	.0429	1.198E-03	.0525	1.349E-03	.0591	8.129E-04
BOT 4687(131)	11.96	10.97	9.794E-04	.0429	1.198E-03	.0525	1.349E-03	.0591	8.129E-04
NOS 5187(131)	11.96	10.97	9.794E-04	.0429	1.198E-03	.0525	1.349E-03	.0591	8.129E-04
TOP 7608(225)	13.07	12.07	3.201E-03	.1403	4.028E-03	.1766	4.627E-03	.2029	2.644E-03
OS 2608(131)	13.07	12.07	9.337E-04	.0409	1.142E-03	.0501	1.286E-03	.0564	7.751E-04
BOT 4688(131)	13.07	12.07	9.337E-04	.0409	1.142E-03	.0501	1.286E-03	.0564	7.751E-04
NOS 5188(131)	13.07	12.07	9.337E-04	.0409	1.142E-03	.0501	1.286E-03	.0564	7.751E-04
TOP 7609(225)	14.14	13.14	3.067E-03	.1345	3.860E-03	.1693	4.434E-03	.1944	2.533E-03
OS 2609(131)	14.14	13.14	8.946E-04	.0392	1.095E-03	.0480	1.232E-03	.0540	7.427E-04
BOT 4689(131)	14.14	13.14	8.946E-04	.0392	1.095E-03	.0480	1.232E-03	.0540	7.427E-04
NOS 5189(131)	14.14	13.14	8.946E-04	.0392	1.095E-03	.0480	1.232E-03	.0540	7.427E-04

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NASA-RI OH50

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA52E

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
52	0	7.98	426.3	1266	19.96	10.04	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (R= .04 FT)	SIREF (R= .04 FT)
93.6	.044	1.975	3784	3.976E-05	7.538E-08	1.596E 06	2.280E-02	1.910E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAR)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	79	.0497	6.960E-02	6.5260E-02
UP SIDE(US)	7606	131	79	.0497	6.960E-02	6.5260E-02
BOTTOM(BOT)	8176	131	79	.0497	6.960E-02	6.5260E-02
TOP(TOP)	7629	225	79	.0541	1.954E-01	2.0551E-01

PIC NO	TIME DELTIME		M(TO)	M(TO)/MREF	M(.9TO)	M(.9TO)/MREF	M(.892TO)	M(.892TO)/MREF	ST(TO)
TOP 7610(225)	15.24	14.24	2.944E-03	.1292	3.708E-03	.1626	4.259E-03	.1867	2.433E-03
OS 2610(131)	15.24	14.24	8.594E-04	.0377	1.051E-03	.0461	1.193E-03	.0519	7.133E-04
NOT 4689(131)	15.24	14.24	8.594E-04	.0377	1.051E-03	.0461	1.193E-03	.0519	7.133E-04
NOS 5150(131)	15.24	14.24	8.594E-04	.0377	1.051E-03	.0461	1.193E-03	.0519	7.133E-04
TOP 7611(225)	16.32	15.32	2.840E-03	.1246	3.575E-03	.1568	4.107E-03	.1801	2.347E-03
OS 2611(131)	16.32	15.32	8.286E-04	.0363	1.014E-03	.0445	1.151E-03	.0500	6.881E-04
NOT 4691(131)	16.32	15.32	8.286E-04	.0363	1.014E-03	.0445	1.151E-03	.0500	6.881E-04
NOS 5151(131)	16.32	15.32	8.286E-04	.0363	1.014E-03	.0445	1.151E-03	.0500	6.881E-04
TOP 7612(225)	17.42	16.42	2.744E-03	.1203	3.453E-03	.1514	3.966E-03	.1739	2.266E-03
OS 2612(131)	17.42	16.42	8.004E-04	.0351	9.793E-04	.0429	1.102E-03	.0483	6.644E-04
NOT 4692(131)	17.42	16.42	8.004E-04	.0351	9.793E-04	.0429	1.102E-03	.0483	6.644E-04
NOS 5152(131)	17.42	16.42	8.004E-04	.0351	9.793E-04	.0429	1.102E-03	.0483	6.644E-04
NOT 4693(131)	18.50	17.50	7.746E-04	.0340	9.487E-04	.0416	1.068E-03	.0468	6.432E-04
TOP 7613(225)	18.52	17.52	2.656E-03	.1164	3.343E-03	.1466	3.844E-03	.1683	2.193E-03
OS 2613(131)	18.52	17.52	7.748E-04	.0340	9.488E-04	.0416	1.068E-03	.0468	6.429E-04
NOS 5153(131)	18.52	17.52	7.748E-04	.0340	9.488E-04	.0416	1.067E-03	.0468	6.429E-04
TOP 7614(225)	19.60	18.60	2.578E-03	.1131	3.245E-03	.1423	3.727E-03	.1635	2.130E-03
OS 2614(131)	19.60	18.60	7.521E-04	.0330	9.202E-04	.0404	1.036E-03	.0454	6.245E-04
NOT 4694(131)	19.60	18.60	7.521E-04	.0330	9.202E-04	.0404	1.036E-03	.0454	6.245E-04
NOS 5154(131)	19.60	18.60	7.521E-04	.0330	9.202E-04	.0404	1.036E-03	.0454	6.245E-04
TOP 7615(225)	20.70	19.70	2.505E-03	.1099	3.153E-03	.1382	3.621E-03	.1588	2.069E-03
OS 2615(131)	20.70	19.70	7.307E-04	.0320	8.941E-04	.0392	1.006E-03	.0441	6.066E-04
NOT 4695(131)	20.70	19.70	7.307E-04	.0320	8.941E-04	.0392	1.006E-03	.0441	6.066E-04
NOS 5155(131)	20.70	19.70	7.307E-04	.0320	8.941E-04	.0392	1.006E-03	.0441	6.066E-04
NOT 4696(131)	21.78	20.78	7.116E-04	.0312	8.706E-04	.0382	9.798E-04	.0430	5.903E-04

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AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA52E

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
52	0	7.96	676.6	1286	19.96	19.04	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (H= .04 FT)	STHEF (H= .04 FT)
93.6	.048	1.960	3744	3.379E-05	7.539E-08	1.697E 06	2.281E-02	1.909E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCCAK)	THAR(TO)	META(TO)
NOF SIDE(NOS)	7576	131	79	.0497	6.960E-02	6.5260E-02
OP SIDE(OS)	7596	131	79	.0497	6.960E-02	6.5260E-02
HOTTOM(HOT)	6176	131	79	.0497	6.960E-02	6.5260E-02
TOF(TOF)	7529	225	79	.0561	1.954E-01	2.0551E-01

PIC NO	TIME DELTIME		H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.892TO)	H(.892TO)/HREF	ST(TO)
TOF 7616(225)	21.80	20.80	2.439E-03	.1069	3.068E-03	.1345	3.524E-03	.1545	2.012E-03
OS 2616(131)	21.80	20.80	7.111E-04	.0312	8.701E-04	.0381	9.792E-04	.0429	5.901E-04
NOS 9196(131)	21.80	20.80	7.111E-04	.0312	8.701E-04	.0381	9.792E-04	.0429	5.901E-04
TOF 7617(225)	22.88	21.88	2.377E-03	.1042	2.992E-03	.1311	3.436E-03	.1506	1.962E-03
OS 2617(131)	22.88	21.88	6.934E-04	.0304	8.485E-04	.0372	9.549E-04	.0419	5.753E-04
HOT 4697(131)	22.88	21.88	6.934E-04	.0304	8.485E-04	.0372	9.549E-04	.0419	5.753E-04
NOS 9197(131)	22.88	21.88	6.934E-04	.0304	8.485E-04	.0372	9.549E-04	.0419	5.753E-04
HOT 4698(131)	23.95	22.95	6.775E-04	.0297	8.283E-04	.0363	9.322E-04	.0409	5.617E-04
TOF 7618(225)	23.98	22.98	2.319E-03	.1016	2.916E-03	.1279	3.353E-03	.1470	1.913E-03
OS 2618(131)	23.98	22.98	6.766E-04	.0297	8.279E-04	.0363	9.317E-04	.0408	5.610E-04
NOS 9198(131)	23.98	22.98	6.765E-04	.0297	8.279E-04	.0363	9.317E-04	.0408	5.610E-04
OS 2619(131)	25.05	24.06	6.613E-04	.0290	8.091E-04	.0355	9.106E-04	.0399	5.487E-04
HOT 4699(131)	25.05	24.06	6.613E-04	.0290	8.091E-04	.0355	9.106E-04	.0399	5.487E-04
NOS 9199(131)	25.05	24.06	6.613E-04	.0290	8.091E-04	.0355	9.106E-04	.0399	5.487E-04
TOF 7619(225)	25.08	24.08	2.266E-03	.0993	2.852E-03	.1250	3.276E-03	.1436	1.870E-03
TOF 7620(225)	26.16	25.16	2.217E-03	.0972	2.790E-03	.1223	3.205E-03	.1405	1.830E-03
OS 2620(131)	26.16	25.16	6.467E-04	.0283	7.912E-04	.0347	8.905E-04	.0390	5.365E-04
HOT 4700(131)	26.16	25.16	6.467E-04	.0283	7.912E-04	.0347	8.905E-04	.0390	5.365E-04
NOS 9200(131)	26.16	25.16	6.467E-04	.0283	7.912E-04	.0347	8.905E-04	.0390	5.365E-04
TOF 7621(225)	27.23	26.23	2.171E-03	.0951	2.732E-03	.1197	3.136E-03	.1375	1.790E-03
OS 2621(131)	27.23	26.23	6.332E-04	.0277	7.748E-04	.0340	8.720E-04	.0382	5.250E-04
HOT 4701(131)	27.23	26.23	6.332E-04	.0277	7.748E-04	.0340	8.720E-04	.0382	5.250E-04
NOS 9201(131)	27.23	26.23	6.332E-04	.0277	7.748E-04	.0340	8.720E-04	.0382	5.250E-04
OS 2622(131)	28.31	27.31	6.206E-04	.0272	7.594E-04	.0333	8.546E-04	.0375	5.145E-04
HOT 4702(131)	28.31	27.31	6.206E-04	.0272	7.594E-04	.0333	8.546E-04	.0375	5.145E-04

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE

VON KARMAN GAS DYNAMICS FACILITY

VAS26 — 50 INCH HYPERSONIC TUNNEL 9

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
52	0	7.98	426.9	1226	19.98	10.04	30.00	0	0

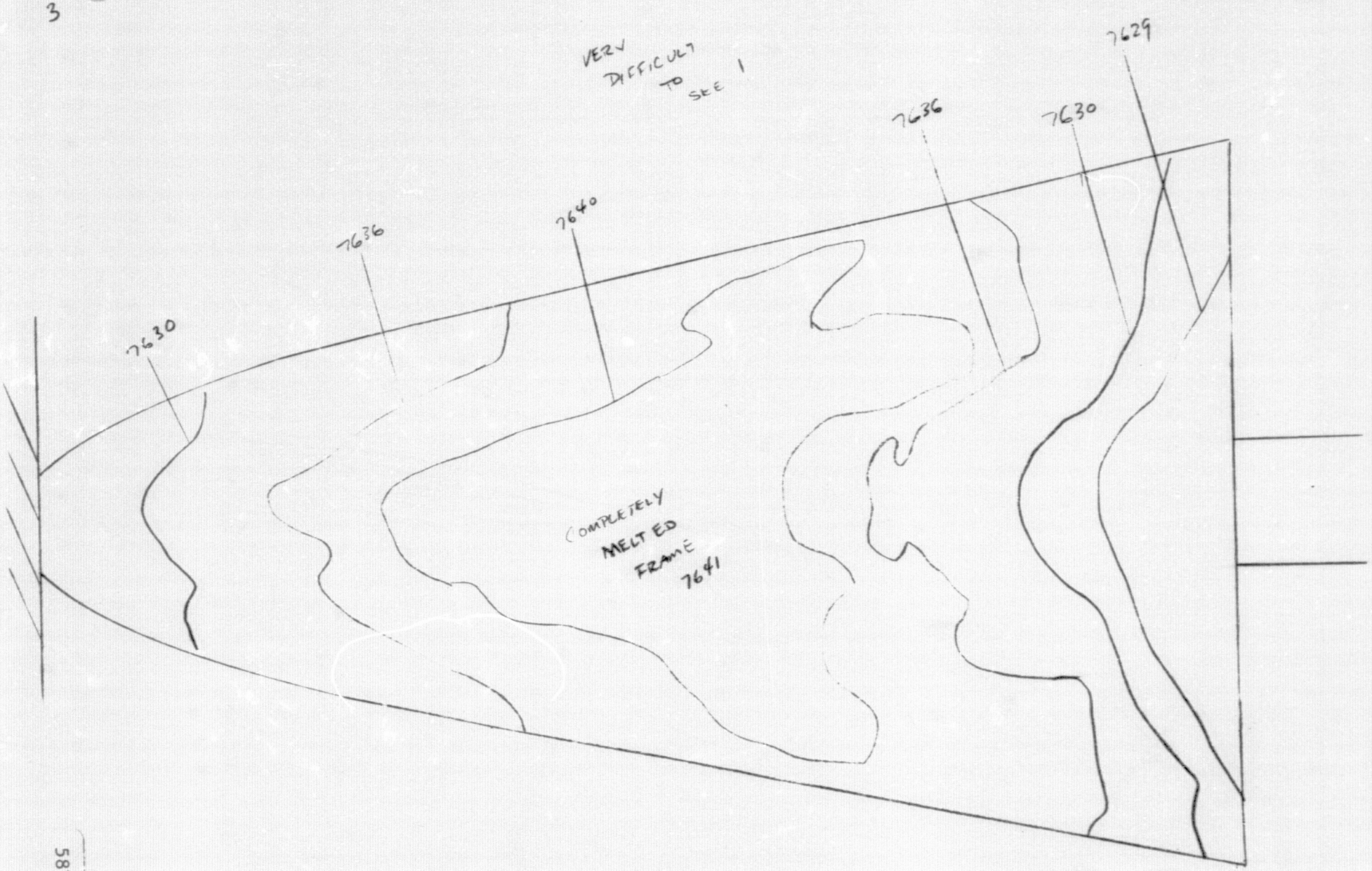
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	XREF (R= .04 FT)	SREF (R= .04 FT)
93.6	.044	1.941	3784	3.382E-05	7.533E-08	1.899E 06	2.282E-02	1.909E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCXK)	TRAN(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	79	.0497	6.960E-02	6.5260E-02
OF SIDE(OS)	7506	131	79	.0497	6.960E-02	6.5260E-02
BOTTOM(BOT)	8176	131	79	.0497	6.960E-02	6.5260E-02
TOP(TOP)	7929	225	79	.0541	1.954E-01	2.0551E-01

PIC NO	TIME DELTIME		H(TO)	H(TO)/XREF	H(.9TO)	H(.9TO)/XREF	H(.892TO)	H(.892TO)/XREF	ST(TO)
TOP 7622(225)	28.33	27.33	2.128E-03	.0932	2.677E-03	.1173	3.074E-03	.1347	1.754E-03
NOS 8282(131)	28.33	27.33	5.204E-04	.0272	7.591E-04	.0333	6.543E-04	.0374	5.142E-04
	29.01		MODEL HAS LEFT CENTERLINE						
TOP 7623(225)	29.41	28.41	2.186E-03	.0914	2.625E-03	.1151	3.016E-03	.1322	1.721E-03
OS 7623(131)	29.41	28.41	6.385E-04	.0267	7.445E-04	.0326	8.379E-04	.0367	5.046E-04
BOT 8763(131)	29.41	28.41	6.385E-04	.0267	7.445E-04	.0326	8.379E-04	.0367	5.046E-04
NOS 8283(131)	29.41	28.41	6.385E-04	.0267	7.445E-04	.0326	8.379E-04	.0367	5.046E-04

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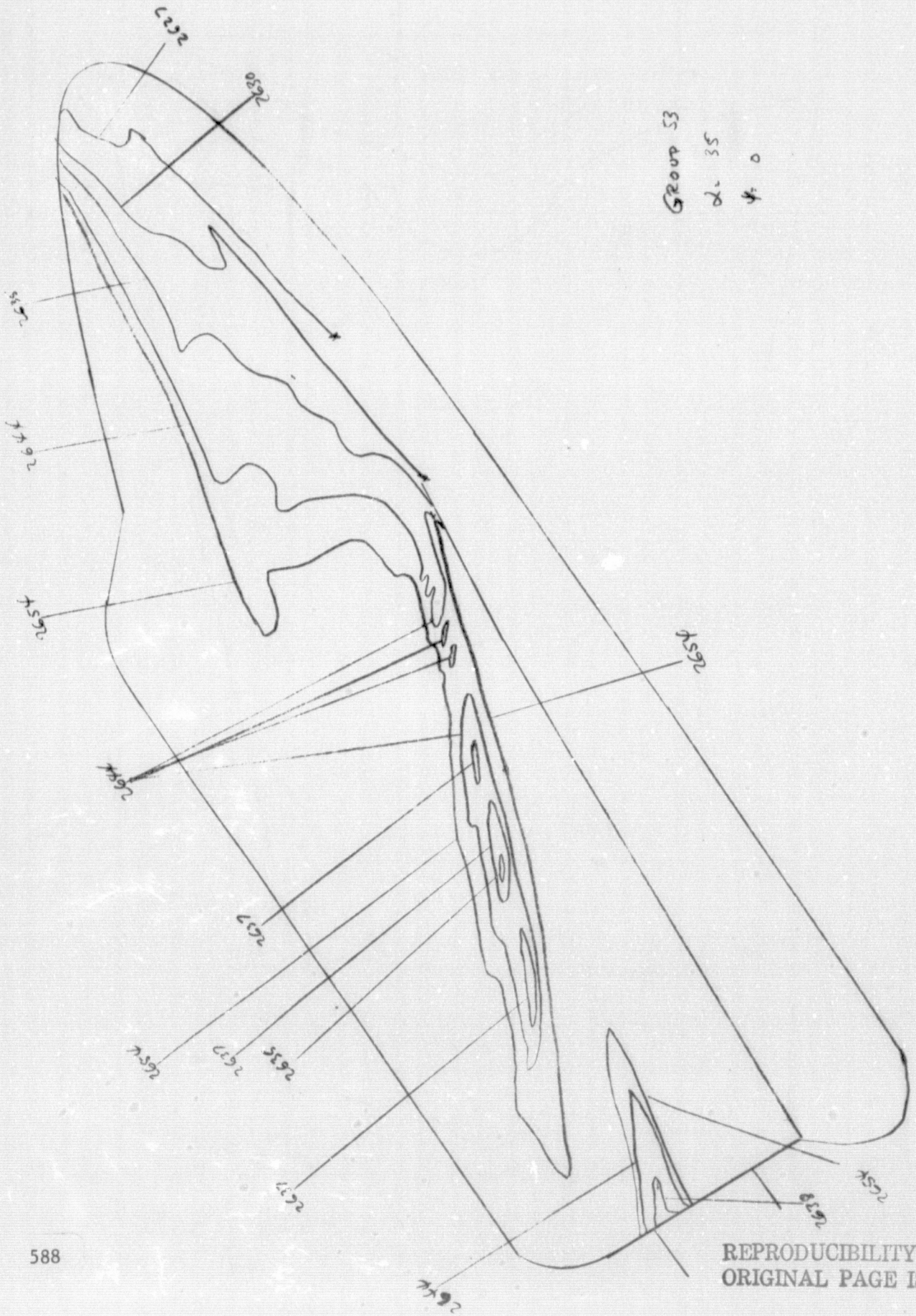
OH - 9A



GROUP 53
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587

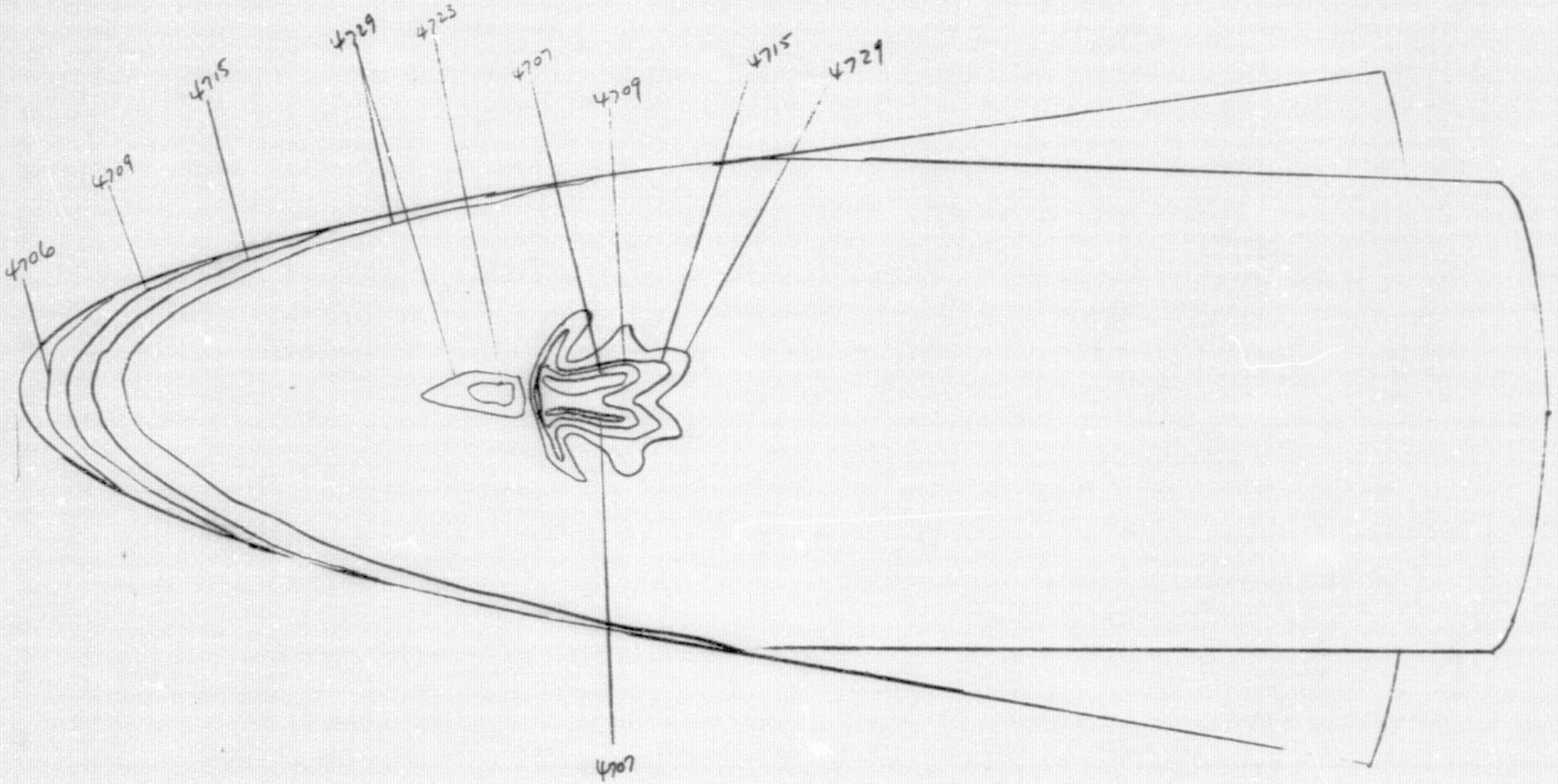
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OH-50A



589

GROUP 53

α = 35

ψ = 0

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NASA-RI OH50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
53	0	7.98	425.9	1290	35.05	-5.05	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
93.9	.049	1.976	3795	3.940E-05	7.563E-08	1.884E 06	2.291E-02	1.915E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACAR)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	84	.0497	0	0
OP SIDE(OS)	7906	131	84	.0497	0	0
NOTTOM(BOT)	8176	131	84	.0497	0	0
TOP(TOP)	7929	225	84	.0541	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TO 7624(225)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 2624(131)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 4704(131)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 9204(131)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 7625(225)	1.13		MODEL HAS NOT REACHED CENTERLINE						
OS 2625(131)	1.13		MODEL HAS NOT REACHED CENTERLINE						
NO 4705(131)	1.13		MODEL HAS NOT REACHED CENTERLINE						
NO 9205(131)	1.13		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.88								
TOP 7626(225)	2.20	1.19	9.788E-03	.4290	1.231E-02	.5397	1.414E-02	.6196	8.098E-03
OS 2626(131)	2.20	1.19	2.475E-03	.1173	3.272E-03	.1434	3.681E-03	.1613	2.224E-03
NOT 4706(131)	2.20	1.19	2.475E-03	.1173	3.272E-03	.1434	3.681E-03	.1613	2.224E-03
NOS 9206(131)	2.20	1.19	2.475E-03	.1173	3.272E-03	.1434	3.681E-03	.1613	2.224E-03
TOP 7627(225)	3.28	2.27	7.945E-03	.3110	8.924E-03	.3912	1.025E-02	.4491	5.870E-03
OS 2627(131)	3.28	2.27	1.939E-03	.0850	2.371E-03	.1039	2.668E-03	.1169	1.613E-03
NOT 4707(131)	3.28	2.27	1.939E-03	.0850	2.371E-03	.1039	2.668E-03	.1169	1.613E-03
NOS 9207(131)	3.28	2.27	1.939E-03	.0850	2.371E-03	.1039	2.668E-03	.1169	1.613E-03
TOP 7628(225)	4.38	3.37	5.820E-03	.2551	7.321E-03	.3209	8.406E-03	.3685	4.816E-03
OS 2628(131)	4.38	3.37	1.891E-03	.0697	1.945E-03	.0853	2.189E-03	.0959	1.323E-03
NOT 4708(131)	4.38	3.37	1.891E-03	.0697	1.945E-03	.0853	2.189E-03	.0959	1.323E-03
NOS 9208(131)	4.38	3.37	1.891E-03	.0697	1.945E-03	.0853	2.189E-03	.0959	1.323E-03
TOP 7629(225)	5.46	4.44	5.367E-03	.2220	6.373E-03	.2792	7.318E-03	.3206	4.188E-03
OS 2629(131)	5.46	4.44	1.865E-03	.0607	1.694E-03	.0742	1.905E-03	.0835	1.150E-03
NOT 4709(131)	5.46	4.44	1.865E-03	.0607	1.694E-03	.0742	1.905E-03	.0835	1.150E-03
NOS 9209(131)	5.46	4.44	1.865E-03	.0607	1.694E-03	.0742	1.905E-03	.0835	1.150E-03
TOP 7630(225)	6.56	5.55	4.534E-03	.1987	5.706E-03	.2499	6.551E-03	.2870	3.748E-03
OS 2630(131)	6.56	5.55	1.240E-03	.0543	1.516E-03	.0664	1.706E-03	.0747	1.030E-03
NOT 4710(131)	6.56	5.55	1.240E-03	.0543	1.516E-03	.0664	1.706E-03	.0747	1.030E-03
NOS 9210(131)	6.56	5.55	1.240E-03	.0543	1.516E-03	.0664	1.706E-03	.0747	1.030E-03

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NASA-RT OH60

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
53	0	7.98	426.7	1291	35.05	-5.05	30.00		

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SL-MS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
94.0	.044	1.95C	3791	3.967E-05	7.564E-08	1.588E 06	2.293E-02	1.913E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	84	.0497	6.298E-02	5.8737E-02
OP SIDE(OS)	7906	131	84	.0497	6.298E-02	5.8737E-02
BOTTOM(BOT)	8176	131	84	.0497	6.298E-02	5.8737E-02
TOP(TOP)	7529	225	84	.0541	1.889E-01	1.9744E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
OS 2631(131)	7.63	6.62	1.134E-03	.0497	1.387E-03	.0608	1.561E-03	.0684	9.432E-04
BOT 4711(131)	7.63	6.62	1.134E-03	.0497	1.387E-03	.0608	1.561E-03	.0684	9.432E-04
NOS 9211(131)	7.63	6.62	1.134E-03	.0497	1.387E-03	.0608	1.561E-03	.0684	9.432E-04
TOP 7631(225)	7.65	6.65	4.133E-03	.1615	5.212E-03	.2284	5.989E-03	.2627	3.426E-03
TOP 7632(225)	6.74	7.72	3.844E-03	.1684	4.835E-03	.2118	5.551E-03	.2432	3.176E-03
OS 2632(131)	8.74	7.72	1.050E-03	.0460	1.285E-03	.0563	1.445E-03	.0633	8.725E-04
BOT 4712(131)	8.74	7.72	1.050E-03	.0460	1.285E-03	.0563	1.445E-03	.0633	8.725E-04
NOS 9212(131)	8.74	7.72	1.050E-03	.0460	1.285E-03	.0563	1.445E-03	.0633	8.725E-04
BOT 4713(131)	9.81	8.80	9.641E-04	.0421	1.204E-03	.0527	1.354E-03	.0593	8.172E-04
TOP 7633(225)	9.84	8.82	3.396E-03	.1575	4.523E-03	.1981	5.193E-03	.2275	2.971E-03
OS 2633(131)	9.84	8.82	9.927E-04	.0430	1.202E-03	.0526	1.352E-03	.0592	8.161E-04
NOS 9213(131)	9.84	8.82	9.927E-04	.0430	1.202E-03	.0526	1.352E-03	.0592	8.161E-04
TOP 7634(225)	10.91	9.90	3.395E-03	.1487	4.270E-03	.1870	4.903E-03	.2147	2.804E-03
OS 2634(131)	10.91	9.90	9.277E-04	.0406	1.135E-03	.0497	1.277E-03	.0559	7.703E-04
BOT 4714(131)	10.91	9.90	9.277E-04	.0406	1.135E-03	.0497	1.277E-03	.0559	7.703E-04
NOS 9214(131)	10.91	9.90	9.277E-04	.0406	1.135E-03	.0497	1.277E-03	.0559	7.703E-04
TOP 7635(225)	12.01	11.00	3.229E-03	.1410	4.051E-03	.1773	4.651E-03	.2036	2.658E-03
OS 2635(131)	12.01	11.00	8.801E-04	.0385	1.076E-03	.0471	1.211E-03	.0530	7.302E-04
BOT 4715(131)	12.01	11.00	8.801E-04	.0385	1.076E-03	.0471	1.211E-03	.0530	7.302E-04
NOS 9215(131)	12.01	11.00	8.801E-04	.0385	1.076E-03	.0471	1.211E-03	.0530	7.302E-04
TOP 7636(225)	13.09	12.08	3.173E-03	.1386	3.866E-03	.1693	4.439E-03	.1944	2.538E-03
OS 2636(131)	13.09	12.08	8.400E-04	.0368	1.027E-03	.0450	1.156E-03	.0506	6.973E-04
BOT 4716(131)	13.09	12.08	8.400E-04	.0368	1.027E-03	.0450	1.156E-03	.0506	6.973E-04
NOS 9216(131)	13.09	12.08	8.400E-04	.0368	1.027E-03	.0450	1.156E-03	.0506	6.973E-04
TOP 7637(225)	14.19	13.18	2.942E-03	.1288	3.701E-03	.1620	4.249E-03	.1861	2.429E-03
OS 2637(131)	14.19	13.18	8.041E-04	.0352	9.835E-04	.0431	1.106E-03	.0484	6.673E-04
BOT 4717(131)	14.19	13.18	8.041E-04	.0352	9.835E-04	.0431	1.106E-03	.0484	6.673E-04
NOS 9217(131)	14.19	13.18	8.041E-04	.0352	9.835E-04	.0431	1.106E-03	.0484	6.673E-04

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4/10/74

NASA-RI 0H50

AEDC(A40,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
53	0	7.98	427.1	1291	35.05	-5.05	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.0	.044	1.942	3740	3.870E-05	7.565E-08	1.589E 06	2.294E-02	1.912E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAR)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	84	.0497	6.298E-02	5.8737E-02
OP SIDE(OS)	7506	131	84	.0497	6.298E-02	5.8737E-02
BOTTOM(BOT)	8176	131	84	.0497	6.298E-02	5.8737E-02
TOP(TOP)	7529	225	84	.0541	1.885E-01	1.9744E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
HOT 4718(131)	15.27	14.26	7.732E-04	.0335	9.456E-04	.0414	1.064E-03	.0466	6.416E-04
TOP 7638(225)	15.29	14.28	2.276E-03	.1238	3.556E-03	.1557	4.082E-03	.1787	2.334E-03
OS 2638(131)	15.29	14.28	7.725E-04	.0338	9.446E-04	.0414	1.063E-03	.0465	6.411E-04
NOS 9218(131)	15.29	14.28	7.725E-04	.0338	9.446E-04	.0414	1.063E-03	.0465	6.411E-04
TOP 7639(225)	16.37	15.36	2.726E-03	.1193	3.429E-03	.1501	3.937E-03	.1723	2.249E-03
OS 2639(131)	16.37	15.36	7.449E-04	.0326	9.111E-04	.0399	1.025E-03	.0449	6.179E-04
HOT 4719(131)	16.37	15.36	7.449E-04	.0326	9.111E-04	.0399	1.025E-03	.0449	6.179E-04
NOS 9219(131)	16.37	15.36	7.449E-04	.0326	9.111E-04	.0399	1.025E-03	.0449	6.179E-04
HOT 4720(131)	17.45	16.43	7.201E-04	.0315	8.808E-04	.0386	9.909E-04	.0434	5.975E-04
TOP 7640(225)	17.47	16.46	2.533E-03	.1153	3.312E-03	.1450	3.803E-03	.1665	2.173E-03
OS 2640(131)	17.47	16.46	7.196E-04	.0315	8.801E-04	.0385	9.902E-04	.0433	5.970E-04
NOS 9220(131)	17.47	16.46	7.196E-04	.0315	8.801E-04	.0385	9.902E-04	.0433	5.970E-04
TOP 7641(225)	18.55	17.53	2.551E-03	.1117	3.209E-03	.1405	3.664E-03	.1613	2.105E-03
OS 2641(131)	18.55	17.53	6.771E-04	.0305	8.527E-04	.0373	9.593E-04	.0420	5.783E-04
HOT 4721(131)	18.55	17.53	6.771E-04	.0305	8.527E-04	.0373	9.593E-04	.0420	5.783E-04
NOS 9221(131)	18.55	17.53	6.771E-04	.0305	8.527E-04	.0373	9.593E-04	.0420	5.783E-04
TOP 7642(225)	19.65	18.64	2.474E-03	.1083	3.113E-03	.1362	3.574E-03	.1564	2.042E-03
OS 2642(131)	19.65	18.64	6.762E-04	.0296	8.271E-04	.0362	9.305E-04	.0407	5.608E-04
HOT 4722(131)	19.65	18.64	6.762E-04	.0296	8.271E-04	.0362	9.305E-04	.0407	5.608E-04
NOS 9222(131)	19.65	18.64	6.762E-04	.0296	8.271E-04	.0362	9.305E-04	.0407	5.608E-04
TOP 7643(225)	20.72	19.71	2.406E-03	.1053	3.026E-03	.1324	3.475E-03	.1520	1.984E-03
OS 2643(131)	20.72	19.71	6.575E-04	.0288	8.042E-04	.0352	9.048E-04	.0396	5.450E-04
HOT 4723(131)	20.72	19.71	6.575E-04	.0288	8.042E-04	.0352	9.048E-04	.0396	5.450E-04
NOS 9223(131)	20.72	19.71	6.575E-04	.0288	8.042E-04	.0352	9.048E-04	.0396	5.450E-04
TOP 7644(225)	21.83	20.81	2.341E-03	.1024	2.945E-03	.1289	3.382E-03	.1480	1.931E-03
OS 2644(131)	21.83	20.81	6.399E-04	.0280	7.826E-04	.0342	8.805E-04	.0385	5.304E-04
HOT 4724(131)	21.83	20.81	6.399E-04	.0280	7.826E-04	.0342	8.805E-04	.0385	5.304E-04
NOS 9224(131)	21.83	20.81	6.399E-04	.0280	7.826E-04	.0342	8.805E-04	.0385	5.304E-04

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4/10/74

NASA-RI OH50

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
53	0	7.98	427.6	1251	35.05	-5.05	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.0	.045	1.984	3720	3.974E-05	7.585E-08	1.691E 06	2.285E-02	1.911E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	84	.0497	6.298E-02	5.8737E-02
OP SIDE(OS)	7606	131	84	.0497	6.298E-02	5.8737E-02
BOTTOM(BOT)	8176	131	84	.0497	6.298E-02	5.8737E-02
TOP(TOP)	7929	225	84	.0541	1.089E-01	1.0744E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 7645(225)	22.90	21.89	2.268E-03	.0999	2.872E-03	.1257	3.297E-03	.1443	1.883E-03
OS 2645(131)	22.90	21.89	6.233E-04	.0273	7.631E-04	.0334	8.546E-04	.0376	5.172E-04
BOT 4725(131)	22.93	21.91	6.236E-04	.0273	7.627E-04	.0334	8.581E-04	.0375	5.168E-04
NOS 9225(131)	22.93	21.91	6.236E-04	.0273	7.624E-04	.0334	8.581E-04	.0375	5.168E-04
TOP 7646(225)	24.00	22.99	2.229E-03	.0975	2.802E-03	.1227	3.217E-03	.1409	1.838E-03
OS 2646(131)	24.00	22.99	6.506E-04	.0266	7.440E-04	.0326	8.378E-04	.0367	5.049E-04
BOT 4726(131)	24.00	22.99	6.506E-04	.0266	7.440E-04	.0326	8.378E-04	.0367	5.049E-04
NOS 9226(131)	24.00	22.99	6.506E-04	.0266	7.440E-04	.0326	8.378E-04	.0367	5.049E-04
TOP 7647(225)	25.10	24.09	2.217E-03	.0952	2.737E-03	.1198	3.143E-03	.1375	1.794E-03
OS 2647(131)	25.10	24.09	6.347E-04	.0260	7.274E-04	.0318	8.184E-04	.0358	4.929E-04
BOT 4727(131)	25.10	24.09	6.347E-04	.0260	7.274E-04	.0318	8.184E-04	.0358	4.929E-04
NOS 9227(131)	25.10	24.09	6.347E-04	.0260	7.274E-04	.0318	8.184E-04	.0358	4.929E-04
TOP 7648(225)	26.19	25.17	2.129E-03	.0932	2.678E-03	.1172	3.075E-03	.1345	1.755E-03
OS 2648(131)	26.19	25.17	6.196E-04	.0255	7.117E-04	.0311	8.007E-04	.0350	4.822E-04
BOT 4728(131)	26.18	25.17	6.196E-04	.0255	7.117E-04	.0311	8.007E-04	.0350	4.822E-04
NOS 9228(131)	26.18	25.17	6.196E-04	.0255	7.117E-04	.0311	8.007E-04	.0350	4.822E-04
TOP 7649(225)	27.28	26.27	2.084E-03	.0912	2.622E-03	.1147	3.010E-03	.1317	1.719E-03
OS 2649(131)	27.28	26.27	6.096E-04	.0249	6.966E-04	.0305	7.837E-04	.0343	4.721E-04
BOT 4729(131)	27.28	26.27	6.096E-04	.0249	6.966E-04	.0305	7.837E-04	.0343	4.721E-04
NOS 9229(131)	27.28	26.27	6.096E-04	.0249	6.966E-04	.0305	7.837E-04	.0343	4.721E-04
OS 2650(131)	28.36	27.35	5.682E-04	.0244	6.828E-04	.0299	7.682E-04	.0336	4.625E-04
BOT 4730(131)	28.36	27.35	5.682E-04	.0244	6.828E-04	.0299	7.682E-04	.0336	4.625E-04
TOP 7650(225)	28.38	27.37	2.042E-03	.0893	2.568E-03	.1124	2.949E-03	.1290	1.683E-03
NOS 9230(131)	28.38	27.37	5.580E-04	.0244	6.825E-04	.0299	7.678E-04	.0336	4.624E-04
TOP 7651(225)	29.46	28.45	2.003E-03	.0876	2.519E-03	.1102	2.892E-03	.1266	1.652E-03
OS 2651(131)	29.46	28.45	5.473E-04	.0239	6.694E-04	.0293	7.531E-04	.0330	4.537E-04
BOT 4731(131)	29.46	28.45	5.473E-04	.0239	6.694E-04	.0293	7.531E-04	.0330	4.537E-04
NOS 9231(131)	29.46	28.45	5.473E-04	.0239	6.694E-04	.0293	7.531E-04	.0330	4.537E-04

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4/10/74

NASA-RI 0H50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

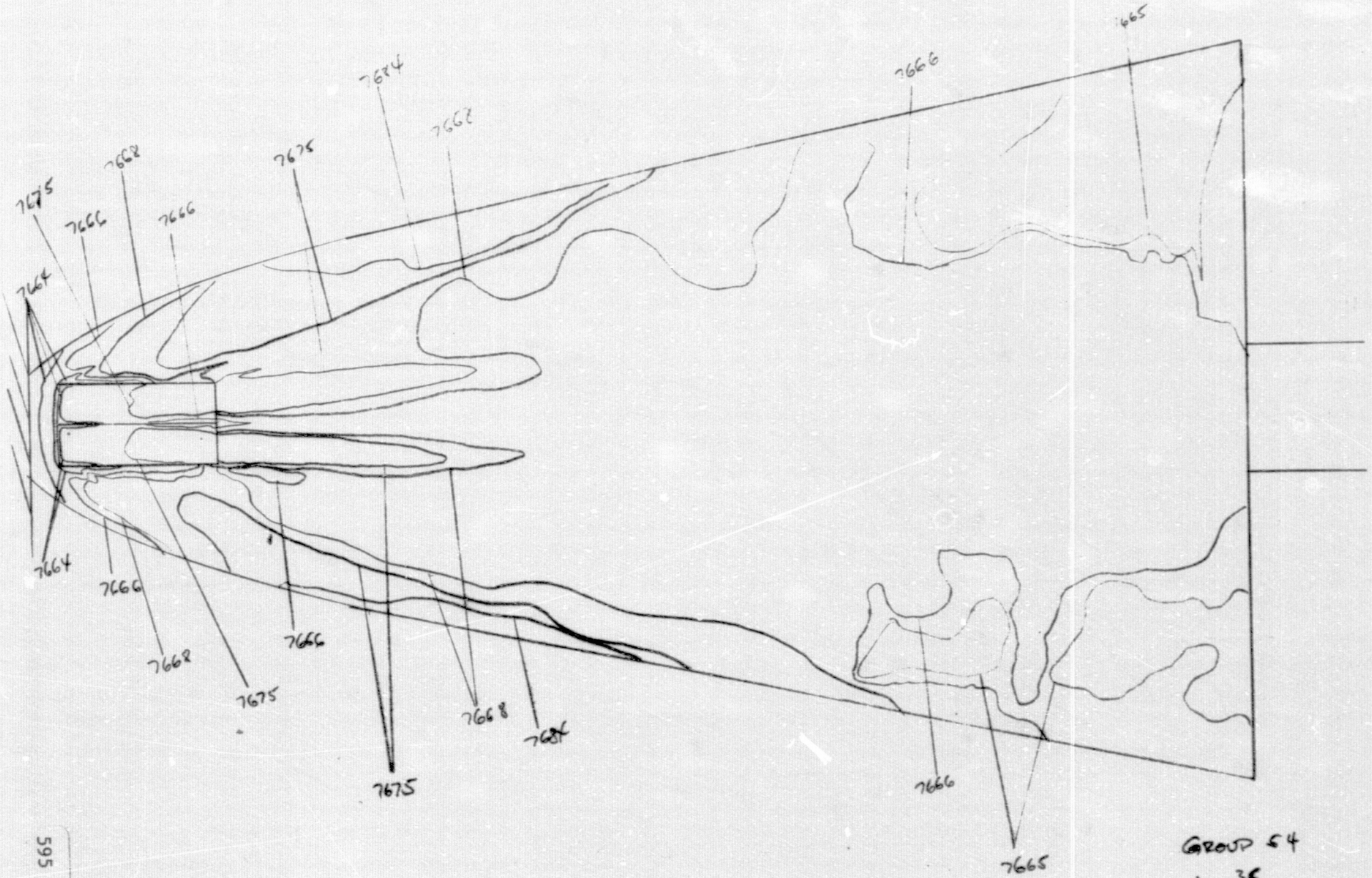
GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
53	0	7.98	427.6	1291	35.05	-5.05	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	U-INF (FT/SEC)	V-INF	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.0	.045	1.934	3790	3.974E-05	7.565E-08	1.991E 06	2.285E-02	1.911E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	84	.0497	6.298E-02	5.8737E-02
OP SIDE(OS)	7906	131	84	.0497	6.298E-02	5.8737E-02
BOTTOM(BOT)	8176	131	84	.0497	6.298E-02	5.8737E-02
TOP(TOP)	7529	225	84	.0541	1.859E-01	1.9744E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 7652(225)	30.54	25.62	1.966E-03	.0860	2.473E-03	.1082	2.839E-03	.1242	1.621E-03
OS 2652(131)	30.54	25.62	5.373E-04	.0235	6.571E-04	.0288	7.393E-04	.0323	4.454E-04
HOT 4732(131)	30.54	25.62	5.373E-04	.0235	6.571E-04	.0288	7.393E-04	.0323	4.454E-04
NOS 9232(131)	30.54	25.62	5.373E-04	.0235	6.571E-04	.0288	7.393E-04	.0323	4.454E-04
TOP 7653(225)	31.64	30.62	1.938E-03	.0844	2.426E-03	.1062	2.788E-03	.1220	1.591E-03
OS 2653(131)	31.64	30.62	5.275E-04	.0231	6.452E-04	.0282	7.259E-04	.0318	4.371E-04
HOT 4733(131)	31.64	30.62	5.275E-04	.0231	6.452E-04	.0282	7.259E-04	.0318	4.371E-04
NOS 9233(131)	31.64	30.62	5.275E-04	.0231	6.452E-04	.0282	7.259E-04	.0318	4.371E-04
HOT 4734(131)	32.71	31.70	5.195E-04	.0227	6.341E-04	.0277	7.134E-04	.0312	4.297E-04
TOP 7654(225)	32.74	31.73	1.896E-03	.0830	2.380E-03	.1044	2.739E-03	.1199	1.564E-03
OS 2654(131)	32.74	31.73	5.183E-04	.0227	6.339E-04	.0277	7.132E-04	.0312	4.295E-04
NOS 9234(131)	32.74	31.73	5.183E-04	.0227	6.339E-04	.0277	7.132E-04	.0312	4.295E-04
TOP 7655(225)	33.81	32.80	1.865E-03	.0816	2.346E-03	.1026	2.694E-03	.1179	1.538E-03
OS 2655(131)	33.81	32.80	5.097E-04	.0223	6.234E-04	.0273	7.014E-04	.0307	4.224E-04
HOT 4735(131)	33.81	32.80	5.097E-04	.0223	6.234E-04	.0273	7.014E-04	.0307	4.224E-04
NOS 9235(131)	33.81	32.80	5.097E-04	.0223	6.234E-04	.0273	7.014E-04	.0307	4.224E-04
TOP 7656(225)	34.92	33.90	1.834E-03	.0803	2.308E-03	.1010	2.649E-03	.1159	1.513E-03
OS 2656(131)	34.92	33.90	5.014E-04	.0219	6.132E-04	.0268	6.899E-04	.0302	4.156E-04
HOT 4736(131)	34.92	33.90	5.014E-04	.0219	6.132E-04	.0268	6.899E-04	.0302	4.156E-04
NOS 9236(131)	34.92	33.90	5.014E-04	.0219	6.132E-04	.0268	6.899E-04	.0302	4.156E-04
	35.32		MODEL HAS LEFT CENTERLINE						
TOP 7657(225)	35.99	34.98	1.906E-03	.0790	2.272E-03	.0996	2.608E-03	.1141	1.490E-03
OS 2657(131)	35.99	34.98	4.936E-04	.0216	6.037E-04	.0264	6.792E-04	.0297	4.092E-04
HOT 4737(131)	35.99	34.98	4.936E-04	.0216	6.037E-04	.0264	6.792E-04	.0297	4.092E-04
NOS 9237(131)	35.99	34.98	4.936E-04	.0216	6.037E-04	.0264	6.792E-04	.0297	4.092E-04

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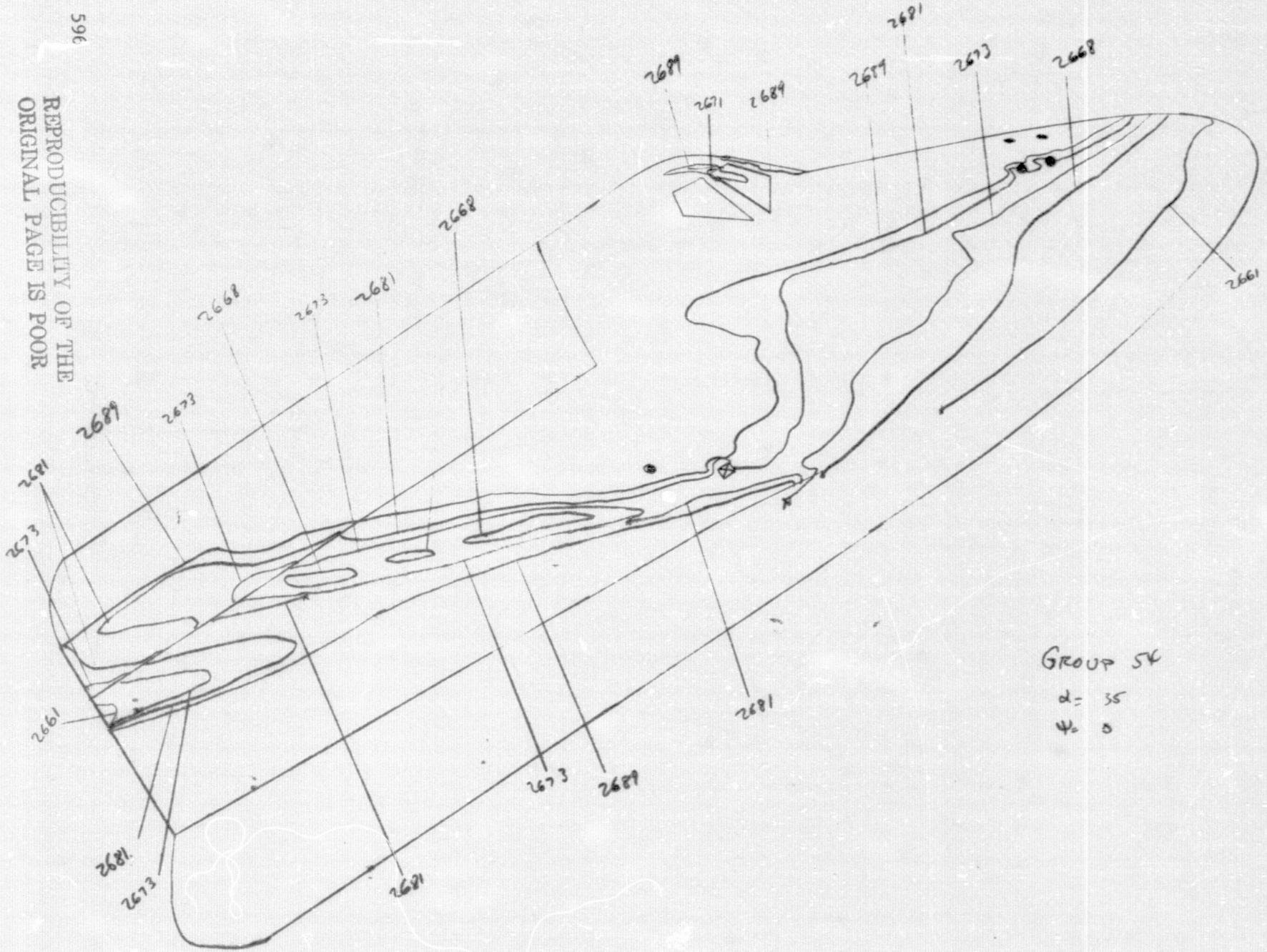


GROUP 54
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$\psi = 0$

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

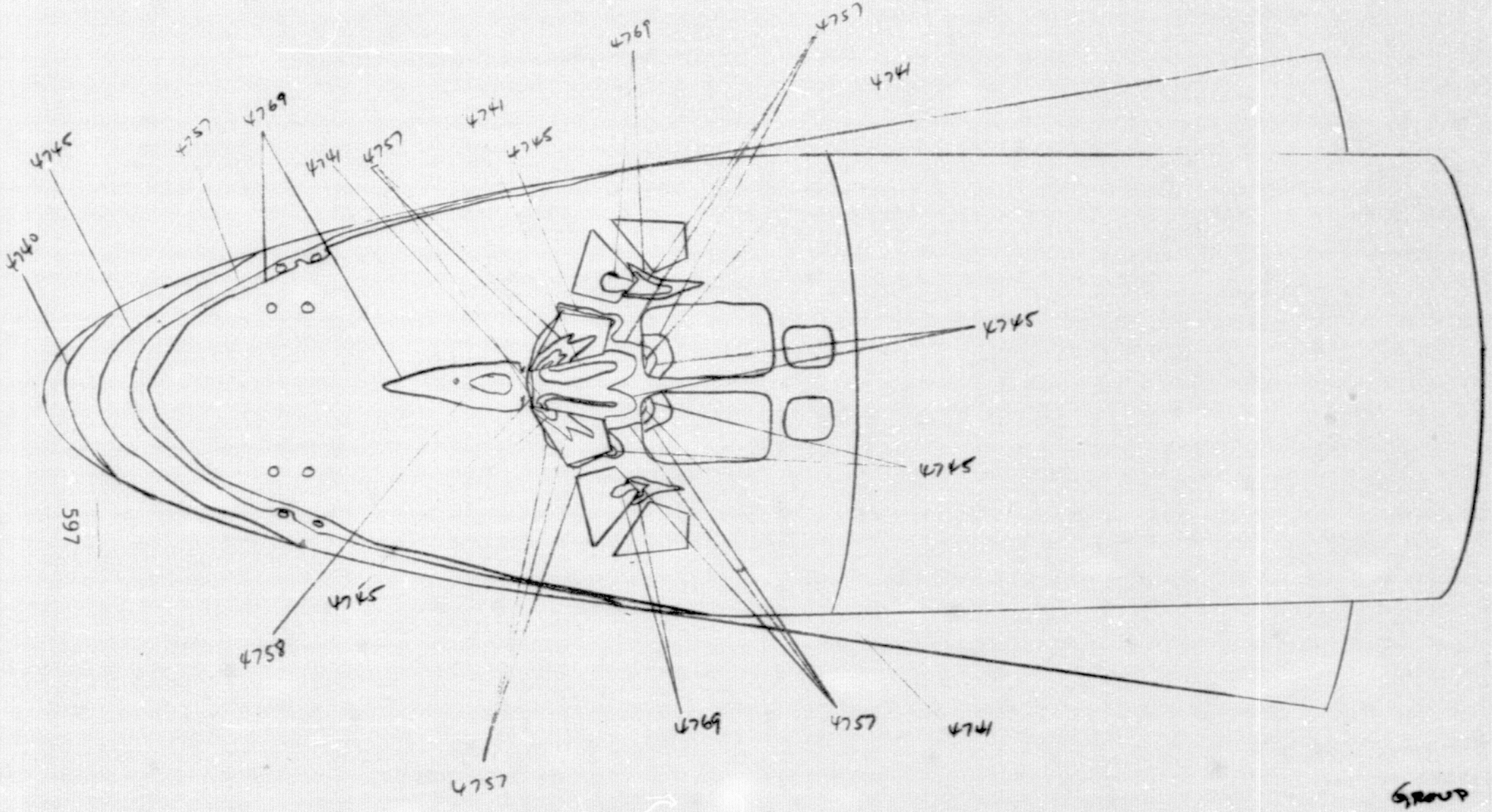
596

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR



GROUP 5K
$\alpha = 35$
$\Psi = 0$

OR SOA



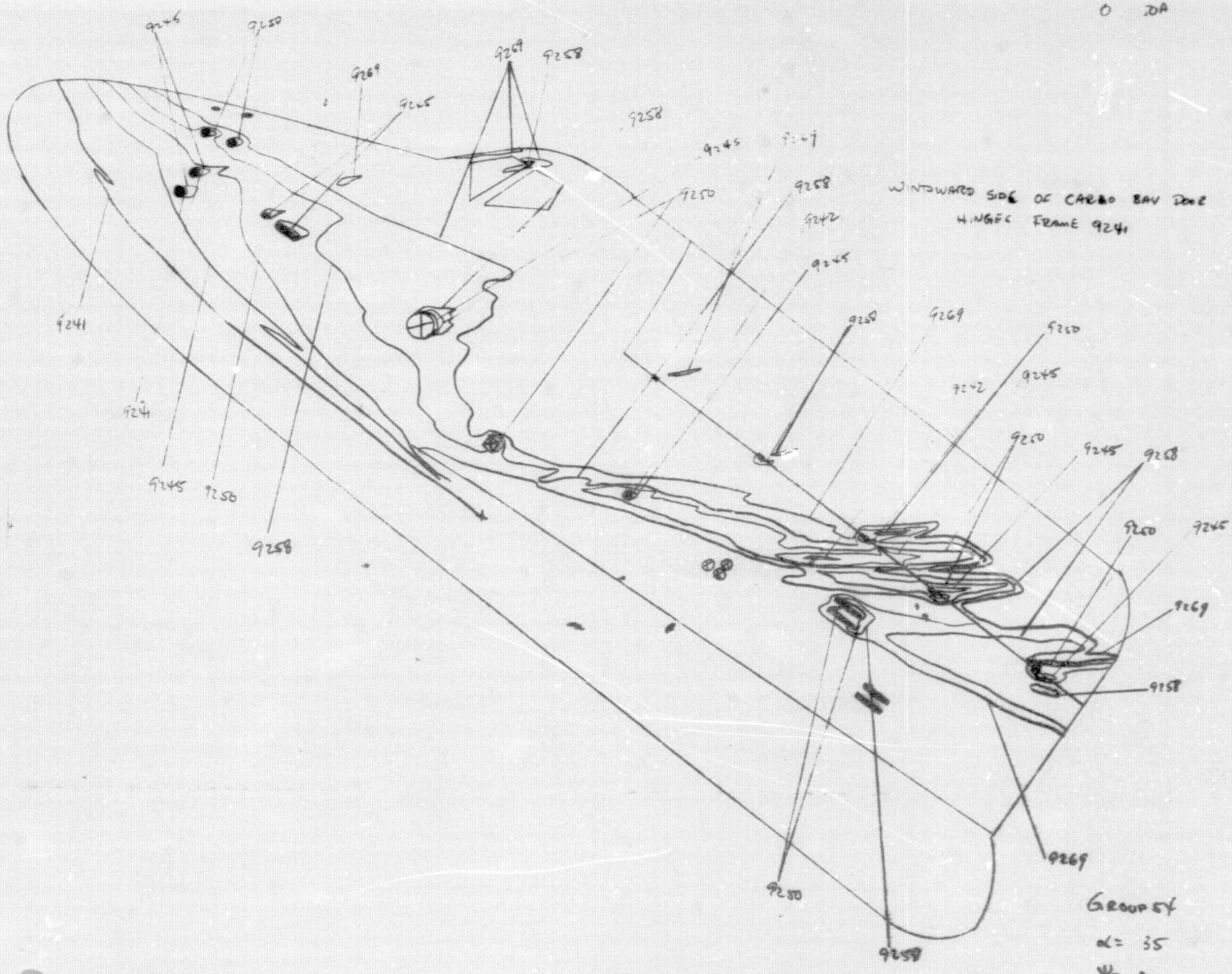
597

GROUP SY

$\alpha = 35$

$\Psi = 0$

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR


WINDWARD SIDE OF CARGO BAY DOOR
HINGE FRAME 9241
9241
9245
9250
9258
9269
9242
GROUP 54
α = 35
ψ = 0

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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4/10/74

NASA-RI 0H50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VAS26 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
54	C	7.98	425.3	1254	35.05	-5.05	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	PE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.044	1.974	3749	3.442E-05	7.567E-08	1.572E 06	2.290E-02	1.929E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAK)	TRAN(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	82	.0497	0	0
OP SIDE(OS)	7906	131	82	.0497	0	0
HOITOM(BOT)	8176	131	82	.0497	0	0
TOP(TOP)	7529	300	82	.0568	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TO 7458(300)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 2458(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 4738(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 9238(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 7459(300)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 2459(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
HO 4739(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 9239(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.50								
TOP 7660(300)	2.18	1.17	1.769E-02	.7756	2.292E-02	1.0051	2.693E-02	1.1808	1.462E-02
OS 2660(131)	2.18	1.17	2.801E-03	.1228	3.420E-03	.1500	3.847E-03	.1687	2.337E-03
HOT 4740(131)	2.18	1.17	2.801E-03	.1228	3.420E-03	.1500	3.847E-03	.1687	2.337E-03
NOS 9240(131)	2.18	1.17	2.801E-03	.1228	3.420E-03	.1500	3.847E-03	.1687	2.337E-03
TOP 7661(300)	3.28	2.27	1.268E-02	.5561	1.644E-02	.7207	1.931E-02	.8467	1.048E-02
OS 2661(131)	3.28	2.27	2.809E-03	.0881	2.453E-03	.1075	2.759E-03	.1209	1.675E-03
HOT 4741(131)	3.28	2.27	2.809E-03	.0881	2.453E-03	.1075	2.759E-03	.1209	1.675E-03
NOS 9241(131)	3.28	2.27	2.809E-03	.0881	2.453E-03	.1075	2.759E-03	.1209	1.675E-03
TOP 7662(300)	4.36	3.36	1.045E-02	.4579	1.354E-02	.5934	1.590E-02	.6971	8.631E-03
OS 2662(131)	4.36	3.36	1.654E-03	.0725	2.020E-03	.0885	2.272E-03	.0996	1.379E-03
HOT 4742(131)	4.36	3.36	1.654E-03	.0725	2.020E-03	.0885	2.272E-03	.0996	1.379E-03
NOS 9242(131)	4.36	3.36	1.654E-03	.0725	2.020E-03	.0885	2.272E-03	.0996	1.379E-03
TOP 7663(300)	5.46	4.44	8.659E-03	.3971	1.172E-02	.5146	1.379E-02	.6045	7.484E-03
OS 2663(131)	5.46	4.44	1.435E-03	.0629	1.752E-03	.0768	1.970E-03	.0864	1.196E-03
HOT 4743(131)	5.46	4.44	1.435E-03	.0629	1.752E-03	.0768	1.970E-03	.0864	1.196E-03
NOS 9243(131)	5.46	4.44	1.435E-03	.0629	1.752E-03	.0768	1.970E-03	.0864	1.196E-03
HOT 4744(131)	6.53	5.52	1.247E-03	.0564	1.572E-03	.0689	1.768E-03	.0775	1.073E-03

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4/10/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
54	0	7.98	425.7	1295	35.05	-5.05	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.7	.044	1.975	3796	3.945E-05	7.588E-08	1.974E 06	2.281E-02	1.919E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TRAR(TO)	BETA(TO)
NOR SIDE(NCS)	7576	131	82	.0497	6.511E-02	6.0854E-02
UP SIDE(US)	7506	131	82	.0497	6.511E-02	6.0854E-02
BOTTOM(BOT)	8176	131	82	.0497	6.511E-02	6.0854E-02
TOP(TOP)	7929	300	82	.0568	2.897E-01	3.3626E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 7664(300)	6.56	5.55	8.114E-03	.3555	1.051E-02	.4607	1.235E-02	.5412	6.700E-03
OS 7664(131)	6.56	5.55	1.288E-03	.0563	1.568E-03	.0687	1.764E-03	.0773	1.071E-03
NOS 7244(131)	6.56	5.55	1.288E-03	.0563	1.568E-03	.0687	1.764E-03	.0773	1.071E-03
TOP 7665(300)	7.63	6.62	7.422E-03	.3253	9.618E-03	.4215	1.130E-02	.4952	6.130E-03
OS 7665(131)	7.63	6.62	1.175E-03	.0515	1.435E-03	.0629	1.614E-03	.0707	9.796E-04
HOT 4745(131)	7.63	6.62	1.175E-03	.0515	1.435E-03	.0629	1.614E-03	.0707	9.796E-04
NOS 7245(131)	7.63	6.62	1.175E-03	.0515	1.435E-03	.0629	1.614E-03	.0707	9.796E-04
TOP 7666(300)	8.74	7.72	6.873E-03	.3011	8.906E-03	.3902	1.046E-02	.4586	5.674E-03
OS 7666(131)	8.74	7.72	1.088E-03	.0477	1.329E-03	.0582	1.495E-03	.0655	9.067E-04
HOT 4746(131)	8.74	7.72	1.088E-03	.0477	1.329E-03	.0582	1.495E-03	.0655	9.067E-04
NOS 7246(131)	8.74	7.72	1.088E-03	.0477	1.329E-03	.0582	1.495E-03	.0655	9.067E-04
TOP 7667(300)	9.81	8.80	6.439E-03	.2821	8.344E-03	.3656	9.802E-03	.4295	5.316E-03
OS 7667(131)	9.81	8.80	1.020E-03	.0447	1.245E-03	.0546	1.400E-03	.0614	8.496E-04
HOT 4747(131)	9.81	8.80	1.020E-03	.0447	1.245E-03	.0546	1.400E-03	.0614	8.496E-04
NOS 7247(131)	9.81	8.80	1.020E-03	.0447	1.245E-03	.0546	1.400E-03	.0614	8.496E-04
TOP 7668(300)	10.91	9.90	6.079E-03	.2660	7.866E-03	.3447	9.241E-03	.4049	5.011E-03
OS 7668(131)	10.91	9.90	9.612E-04	.0421	1.174E-03	.0514	1.320E-03	.0578	8.008E-04
HOT 4748(131)	10.91	9.90	9.612E-04	.0421	1.174E-03	.0514	1.320E-03	.0578	8.008E-04
NOS 7248(131)	10.91	9.90	9.612E-04	.0421	1.174E-03	.0514	1.320E-03	.0578	8.008E-04
TOP 7669(300)	11.99	10.98	5.765E-03	.2526	7.471E-03	.3273	8.776E-03	.3845	4.759E-03
OS 7669(131)	11.99	10.98	9.129E-04	.0400	1.115E-03	.0488	1.254E-03	.0549	7.605E-04
HOT 4749(131)	11.99	10.98	9.129E-04	.0400	1.115E-03	.0488	1.254E-03	.0549	7.605E-04
NOS 7249(131)	11.99	10.98	9.129E-04	.0400	1.115E-03	.0488	1.254E-03	.0549	7.605E-04
TOP 7670(300)	13.09	12.08	5.496E-03	.2408	7.122E-03	.3120	8.367E-03	.3666	4.536E-03
OS 7670(131)	13.09	12.08	8.702E-04	.0381	1.063E-03	.0466	1.195E-03	.0524	7.248E-04
HOT 4750(131)	13.09	12.08	8.702E-04	.0381	1.063E-03	.0466	1.195E-03	.0524	7.248E-04
NOS 7250(131)	13.09	12.08	8.702E-04	.0381	1.063E-03	.0466	1.195E-03	.0524	7.248E-04

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NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VAS26

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PRESEND	ROLL-MODEL	YAW
54	9	7.98	426.1	1255	35.05	-5.05	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.044	1.977	3796	3.249E-05	7.588E-08	1.575E 06	2.283E-02	1.91BE-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAK)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	82	.0497	6.511E-02	6.0854E-02
OP SIDE(OS)	7506	131	82	.0497	6.511E-02	6.0854E-02
HOTICM(HOT)	8176	131	82	.0497	6.511E-02	6.0854E-02
TOP(TOP)	7529	300	82	.0568	2.497E-01	3.362BE-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
HOT 4751(131)	14.17	13.15	8.339E-04	.0365	1.018E-03	.0446	1.145E-03	.0502	6.945E-04
TOP 7671(300)	14.19	13.18	5.261E-03	.2305	6.818E-03	.2987	8.009E-03	.3509	4.342E-03
OS 2671(131)	14.19	13.18	8.331E-04	.0365	1.017E-03	.0446	1.144E-03	.0501	6.939E-04
NOS 9251(131)	14.19	13.18	8.331E-04	.0365	1.017E-03	.0446	1.144E-03	.0501	6.939E-04
TOP 7672(300)	15.27	14.26	5.054E-03	.2216	6.555E-03	.2871	7.701E-03	.3373	4.173E-03
OS 2672(131)	15.27	14.26	8.010E-04	.0351	9.780E-04	.0428	1.100E-03	.0482	6.669E-04
HOT 4752(131)	15.27	14.26	8.010E-04	.0351	9.780E-04	.0428	1.100E-03	.0482	6.669E-04
NOS 9252(131)	15.27	14.26	8.010E-04	.0351	9.780E-04	.0428	1.100E-03	.0482	6.669E-04
TOP 7673(300)	16.37	15.36	4.874E-03	.2136	6.316E-03	.2766	7.420E-03	.3250	4.021E-03
OS 2673(131)	16.37	15.36	7.719E-04	.0338	9.423E-04	.0413	1.060E-03	.0464	6.425E-04
HOT 4753(131)	16.37	15.36	7.718E-04	.0338	9.423E-04	.0413	1.060E-03	.0464	6.425E-04
NOS 9253(131)	16.37	15.36	7.718E-04	.0338	9.423E-04	.0413	1.060E-03	.0464	6.425E-04
TOP 7674(300)	17.45	16.43	4.711E-03	.2064	6.106E-03	.2675	7.173E-03	.3142	3.888E-03
OS 2674(131)	17.45	16.43	7.461E-04	.0327	9.109E-04	.0399	1.025E-03	.0449	6.213E-04
HOT 4754(131)	17.45	16.43	7.461E-04	.0327	9.109E-04	.0399	1.025E-03	.0449	6.213E-04
NOS 9254(131)	17.45	16.43	7.461E-04	.0327	9.109E-04	.0399	1.025E-03	.0449	6.213E-04
TOP 7675(300)	18.55	17.53	4.561E-03	.1998	5.911E-03	.2589	6.944E-03	.3041	3.763E-03
OS 2675(131)	18.55	17.53	7.223E-04	.0316	8.819E-04	.0386	9.919E-04	.0434	6.013E-04
HOT 4755(131)	18.55	17.53	7.223E-04	.0316	8.819E-04	.0386	9.919E-04	.0434	6.013E-04
NOS 9255(131)	18.55	17.53	7.223E-04	.0316	8.819E-04	.0386	9.919E-04	.0434	6.013E-04
HOT 4756(131)	19.62	18.61	7.011E-04	.0307	8.560E-04	.0375	9.628E-04	.0422	5.833E-04
TOP 7676(300)	19.65	18.64	4.424E-03	.1937	5.734E-03	.2511	6.736E-03	.2950	3.648E-03
OS 2676(131)	19.65	18.64	7.006E-04	.0307	8.554E-04	.0375	9.621E-04	.0421	5.830E-04
NOS 9256(131)	19.65	18.64	7.006E-04	.0307	8.554E-04	.0375	9.621E-04	.0421	5.830E-04
TOP 7677(300)	20.72	19.71	4.302E-03	.1884	5.575E-03	.2442	6.549E-03	.2869	3.550E-03
OS 2677(131)	20.72	19.71	6.812E-04	.0298	8.317E-04	.0364	9.355E-04	.0410	5.673E-04
HOT 4757(131)	20.72	19.71	6.812E-04	.0298	8.317E-04	.0364	9.355E-04	.0410	5.673E-04
NOS 9257(131)	20.72	19.71	6.812E-04	.0298	8.317E-04	.0364	9.355E-04	.0410	5.673E-04

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4/10/74

NASA-RI OH5D — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
54	0	7.98	426.2	1295	35.05	-5.05	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.044	1.978	3796	3.949E-05	7.589E-08	1.976E 06	2.283E-02	1.918E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXX)	TPAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	82	.0497	6.511E-02	6.0854E-02
UP SIDE(US)	7906	131	82	.0497	6.511E-02	6.0854E-02
HOTTOM(BOT)	8176	131	82	.0497	6.511E-02	6.0854E-02
TOP(TOP)	7929	300	82	.0568	2.897E-01	3.3626E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 7678(300)	21.83	20.81	4.166E-03	.1834	5.425E-03	.2377	6.374E-03	.2792	3.455E-03
US 2678(131)	21.83	20.81	6.629E-04	.0290	8.094E-04	.0355	9.104E-04	.0399	5.521E-04
HOT 4758(131)	21.83	20.81	6.629E-04	.0290	8.094E-04	.0355	9.104E-04	.0399	5.521E-04
NOS 9258(131)	21.83	20.81	6.629E-04	.0290	8.094E-04	.0355	9.104E-04	.0399	5.521E-04
TOP 7679(300)	22.90	21.89	4.082E-03	.1788	5.290E-03	.2317	6.215E-03	.2722	3.366E-03
US 2679(131)	22.90	21.89	6.464E-04	.0283	7.893E-04	.0346	8.877E-04	.0389	5.379E-04
HOT 4759(131)	22.90	21.89	6.464E-04	.0283	7.893E-04	.0346	8.877E-04	.0389	5.379E-04
NOS 9259(131)	22.90	21.89	6.464E-04	.0283	7.893E-04	.0346	8.877E-04	.0389	5.379E-04
TOP 7680(300)	24.00	22.99	3.983E-03	.1744	5.162E-03	.2260	6.064E-03	.2655	3.284E-03
US 2680(131)	24.00	22.99	6.308E-04	.0276	7.701E-04	.0337	8.662E-04	.0379	5.248E-04
HOT 4760(131)	24.00	22.99	6.308E-04	.0276	7.701E-04	.0337	8.662E-04	.0379	5.248E-04
NOS 9260(131)	24.00	22.99	6.308E-04	.0276	7.701E-04	.0337	8.662E-04	.0379	5.248E-04
HOT 4761(131)	25.09	24.07	6.165E-04	.0270	7.527E-04	.0330	8.466E-04	.0371	5.131E-04
TOP 7681(300)	25.10	24.09	3.891E-03	.1704	5.043E-03	.2208	5.924E-03	.2594	3.209E-03
US 2681(131)	25.10	24.09	6.162E-04	.0270	7.523E-04	.0329	8.462E-04	.0371	5.128E-04
NOS 9261(131)	25.10	24.09	6.162E-04	.0270	7.523E-04	.0329	8.462E-04	.0371	5.128E-04
TOP 7682(300)	26.18	25.17	3.807E-03	.1667	4.934E-03	.2160	5.796E-03	.2537	3.138E-03
US 2682(131)	26.18	25.17	6.029E-04	.0264	7.361E-04	.0322	8.279E-04	.0362	5.014E-04
HOT 4762(131)	26.18	25.17	6.029E-04	.0264	7.361E-04	.0322	8.279E-04	.0362	5.014E-04
NOS 9262(131)	26.18	25.17	6.029E-04	.0264	7.361E-04	.0322	8.279E-04	.0362	5.014E-04
TOP 7683(300)	27.28	26.27	3.726E-03	.1631	4.829E-03	.2114	5.673E-03	.2484	3.071E-03
US 2683(131)	27.28	26.27	5.901E-04	.0258	7.205E-04	.0315	8.104E-04	.0355	4.908E-04
HOT 4763(131)	27.28	26.27	5.901E-04	.0258	7.205E-04	.0315	8.104E-04	.0355	4.908E-04
NOS 9263(131)	27.28	26.27	5.901E-04	.0258	7.205E-04	.0315	8.104E-04	.0355	4.908E-04
TOP 7684(300)	28.36	27.35	3.652E-03	.1599	4.733E-03	.2072	5.560E-03	.2434	3.010E-03
US 2684(131)	28.36	27.35	5.784E-04	.0253	7.062E-04	.0309	7.943E-04	.0348	4.810E-04
HOT 4764(131)	28.36	27.35	5.784E-04	.0253	7.062E-04	.0309	7.943E-04	.0348	4.810E-04
NOS 9264(131)	28.36	27.35	5.784E-04	.0253	7.062E-04	.0309	7.943E-04	.0348	4.810E-04

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NASA-RI OH50 AEDC(APO,INC.) ARNOLD AFS, TENNESSEE

VON KARMAN GAS DYNAMICS FACILITY

VA52E 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
54	0	7.98	426.8	1295	25.05	-5.05	30.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.3	.044	1.960	3796	3.955E-05	7.549E-08	1.978E 06	2.284E-02	1.917E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (P*ROA*XK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	82	.0497	6.511E-02	6.0854E-02
OP SIDE(OS)	7506	131	82	.0497	6.511E-02	6.0854E-02
BOTTOM(BOT)	8176	131	82	.0497	6.511E-02	6.0854E-02
TOP(TOP)	7529	309	82	.0568	2.897E-01	3.3626E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
TOP 7685(300)	29.46	28.45	3.581E-03	.1567	4.641E-03	.2031	5.452E-03	.2386	2.949E-03
OS 2685(131)	29.46	28.45	5.671E-04	.0248	6.924E-04	.0303	7.787E-04	.0341	4.713E-04
HOT 4765(131)	29.46	28.45	5.671E-04	.0248	6.924E-04	.0303	7.787E-04	.0341	4.713E-04
NOS 9265(131)	29.46	28.45	5.671E-04	.0248	6.924E-04	.0303	7.787E-04	.0341	4.713E-04
HOT 4766(131)	30.54	29.52	5.566E-04	.0244	6.796E-04	.0297	7.644E-04	.0335	4.628E-04
TOP 7686(300)	30.56	29.55	3.514E-03	.1538	4.553E-03	.1993	5.349E-03	.2341	2.895E-03
OS 2686(131)	30.56	29.55	5.564E-04	.0244	6.793E-04	.0297	7.641E-04	.0334	4.626E-04
NOS 9266(131)	30.56	29.55	5.564E-04	.0244	6.793E-04	.0297	7.641E-04	.0334	4.626E-04
TOP 7687(300)	31.64	30.62	3.451E-03	.1510	4.473E-03	.1957	5.254E-03	.2300	2.843E-03
OS 2687(131)	31.64	30.62	5.465E-04	.0239	6.673E-04	.0292	7.505E-04	.0328	4.543E-04
HOT 4767(131)	31.64	30.62	5.465E-04	.0239	6.673E-04	.0292	7.505E-04	.0328	4.543E-04
NOS 9267(131)	31.64	30.62	5.465E-04	.0239	6.673E-04	.0292	7.505E-04	.0328	4.543E-04
TOP 7688(300)	32.74	31.73	3.391E-03	.1484	4.394E-03	.1923	5.162E-03	.2259	2.792E-03
OS 2688(131)	32.74	31.73	5.370E-04	.0235	6.556E-04	.0287	7.374E-04	.0323	4.462E-04
HOT 4768(131)	32.74	31.73	5.370E-04	.0235	6.556E-04	.0287	7.374E-04	.0323	4.462E-04
NOS 9268(131)	32.74	31.73	5.370E-04	.0235	6.556E-04	.0287	7.374E-04	.0323	4.462E-04
TOP 7689(300)	33.81	32.80	3.335E-03	.1465	4.322E-03	.1899	5.077E-03	.2231	2.718E-03
OS 2689(131)	33.81	32.80	5.281E-04	.0232	6.446E-04	.0283	7.252E-04	.0319	4.343E-04
HOT 4769(131)	33.81	32.80	5.281E-04	.0232	6.446E-04	.0283	7.252E-04	.0319	4.343E-04
NOS 9269(131)	33.81	32.80	5.281E-04	.0232	6.446E-04	.0283	7.252E-04	.0319	4.343E-04
TOP 7690(300)	34.92	33.90	3.280E-03	.1434	4.251E-03	.1858	4.994E-03	.2183	2.711E-03
OS 2690(131)	34.92	33.90	5.194E-04	.0227	6.342E-04	.0277	7.133E-04	.0312	4.332E-04
HOT 4770(131)	34.92	33.90	5.194E-04	.0227	6.342E-04	.0277	7.133E-04	.0312	4.332E-04
NOS 9270(131)	34.92	33.90	5.194E-04	.0227	6.342E-04	.0277	7.133E-04	.0312	4.332E-04
	34.97		MODEL HAS LEFT CENTERLINE						

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NASA-RI OH50
VA526

AEDC(AHO-IAC-) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
54	8	7.98	426.9	1261	35.05	-5.05	30.00	0	0

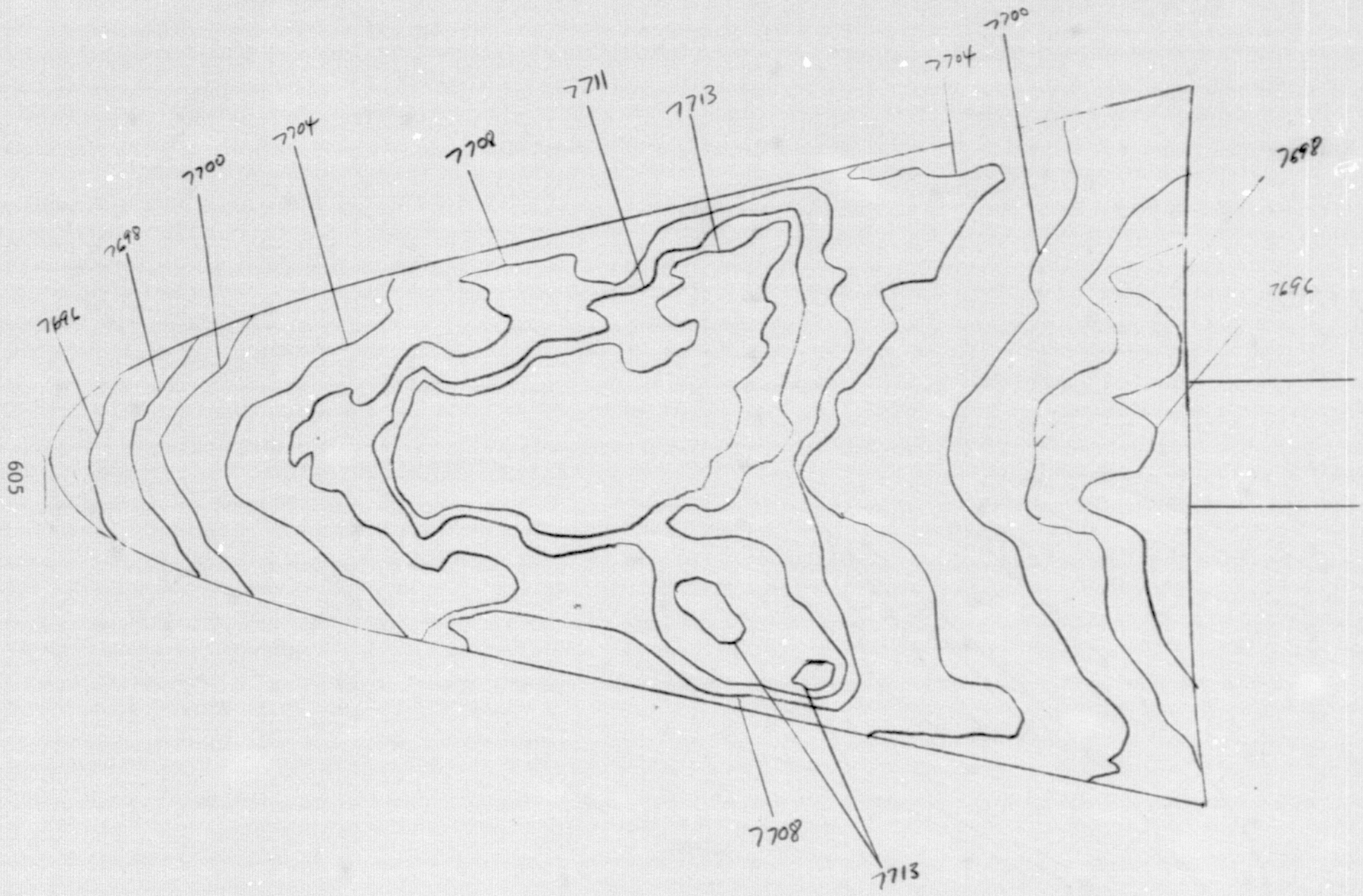
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
91.8	.044	1.981	3747	4.040E-05	7.394E-08	2.058E 06	2.274E-02	1.886E-02

CAMERA	ROLL ANGLE	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXR)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	82	.0497	6.511E-02	6.0854E-02
OP SIDE(OS)	7906	131	82	.0497	6.511E-02	6.0854E-02
BOTTOM(BOT)	8176	131	82	.0497	6.511E-02	6.0854E-02
TOP(TOP)	7929	300	82	.0568	2.897E-01	3.3626E-01

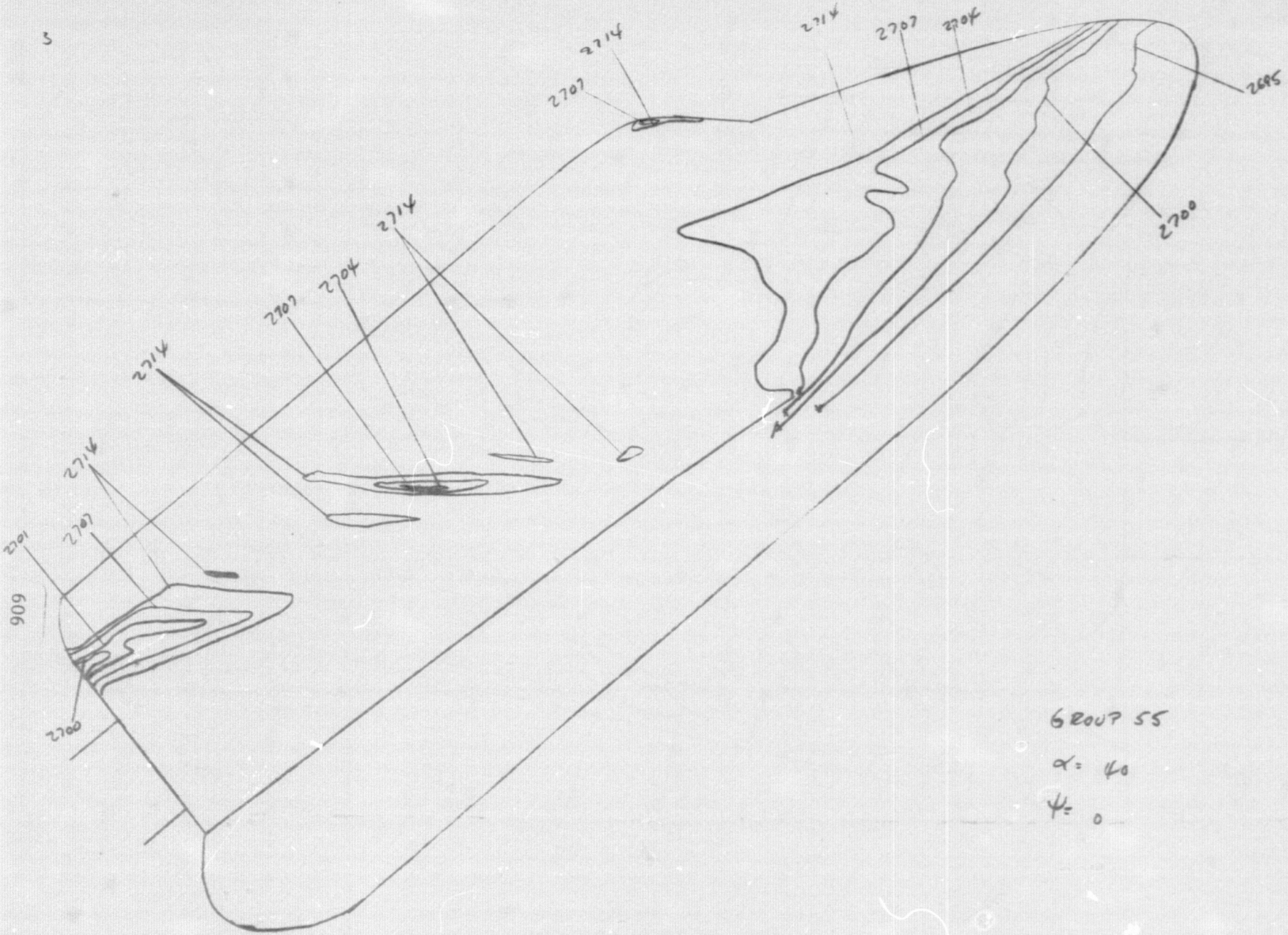
PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TC)	H(.9TO)/HREF	H(.923TO)	H(.923TO)/HREF	ST(TO)
BOT 4771(131)	35.99	34.98	5.114E-04	.0224	6.244E-04	.0273	7.023E-04	.0308	4.237E-04
TOP 7691(300)	36.02	35.00	3.228E-03	.1412	4.183E-03	.1830	4.915E-03	.2149	2.663E-03
OS 7691(131)	36.02	35.00	5.112E-04	.0224	6.241E-04	.0273	7.020E-04	.0307	4.255E-04
NOS 9271(131)	36.02	35.00	5.112E-04	.0224	6.241E-04	.0273	7.020E-04	.0307	4.255E-04

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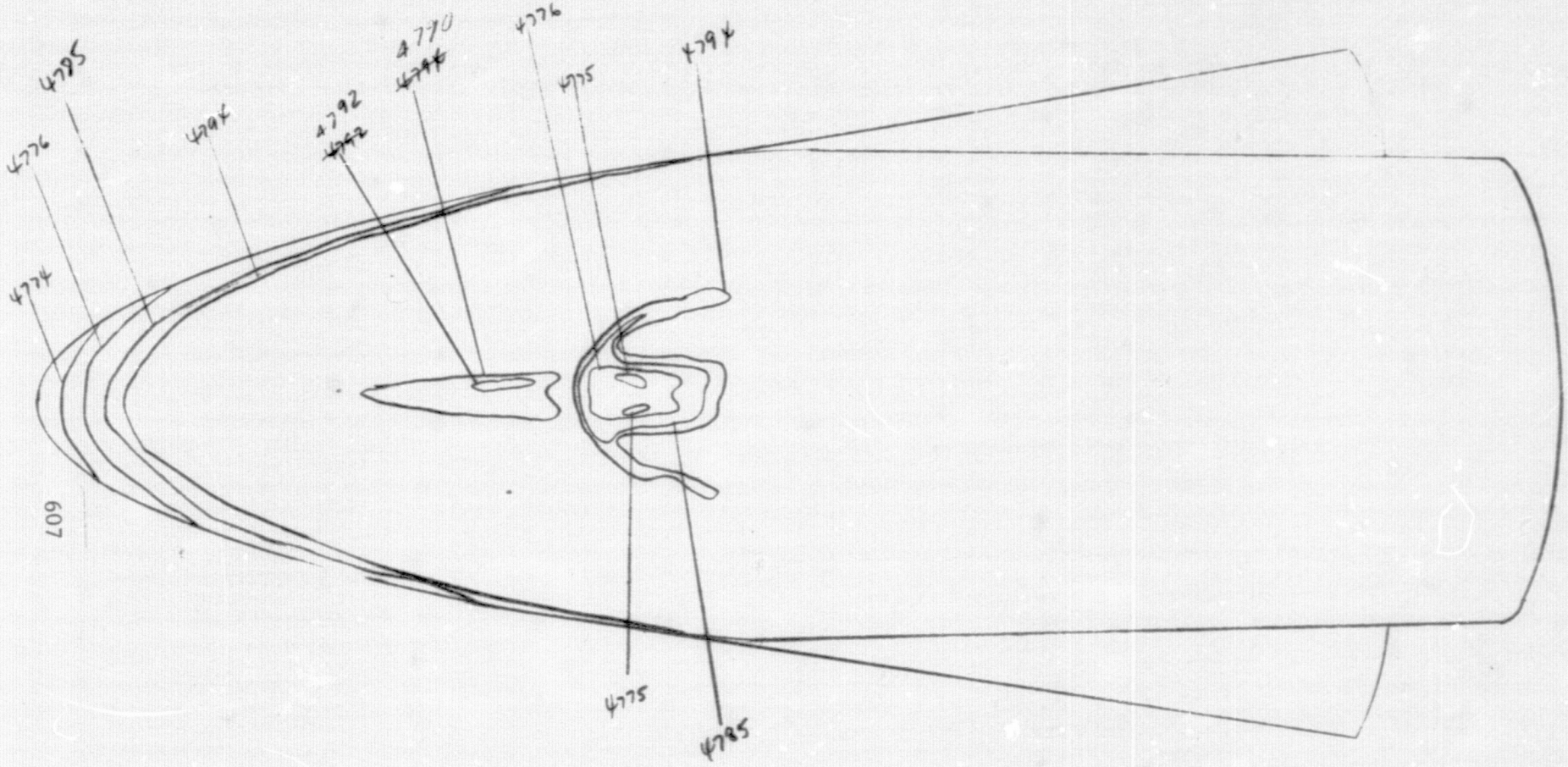
Grow 55
d = 40
φ = 0



GROUP 55

$\alpha = 40$

$\psi = 0$



GROUP 55

$\alpha = 4^\circ$

$\psi = 0$

4/10/74

NASA-RI OHSO

AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

VAS26

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTION	ALPHA-PREBEND	ROLL-MODEL	YAW
55	0	7.98	426.2	1299	40.01	12.99	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.2	.044	1.97E	8802	3.937E-05	7.613E-08	1.966E 06	2.284E-02	1.922E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7575	131	78	.0497	0	0
OF SIDE(OS)	7506	131	78	.0497	0	0
BOTTOM(BOT)	8176	131	78	.0497	0	0
TOP(TOP)	7529	250	78	.0551	0	0

PIC NO	TIME DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
TO 7492(250)	.03	MODEL HAS NOT REACHED CENTERLINE						
OS 2692(131)	.03	MODEL HAS NOT REACHED CENTERLINE						
NO 4772(131)	.03	MODEL HAS NOT REACHED CENTERLINE						
NO 9272(131)	.03	MODEL HAS NOT REACHED CENTERLINE						
TO 7493(250)	1.10	MODEL HAS NOT REACHED CENTERLINE						
OS 2693(131)	1.10	MODEL HAS NOT REACHED CENTERLINE						
NO 4773(131)	1.10	MODEL HAS NOT REACHED CENTERLINE						
NO 9273(131)	1.10	MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME = 1.84								
TOF 7494(250)	2.18 1.17	1.251E-02	.5479	1.585E-02	.6940	1.830E-02	.8010	1.037E-02
OS 2694(131)	2.18 1.17	3.009E-03	.1317	3.673E-03	.1608	4.129E-03	.1808	2.509E-03
NOT 4774(131)	2.18 1.17	3.009E-03	.1317	3.673E-03	.1608	4.129E-03	.1808	2.509E-03
NOS 9274(131)	2.18 1.17	3.009E-03	.1317	3.673E-03	.1608	4.129E-03	.1808	2.509E-03
TOF 7495(250)	3.25 2.24	9.024E-03	.3950	1.143E-02	.5003	1.319E-02	.5775	7.473E-03
OS 2695(131)	3.25 2.24	2.170E-03	.0950	2.649E-03	.1159	2.977E-03	.1303	1.809E-03
NOT 4775(131)	3.25 2.24	2.170E-03	.0950	2.649E-03	.1159	2.977E-03	.1303	1.809E-03
NOS 9275(131)	3.25 2.24	2.170E-03	.0950	2.649E-03	.1159	2.977E-03	.1303	1.809E-03
TOF 7496(250)	4.36 3.34	7.398E-03	.3234	9.360E-03	.4096	1.080E-02	.4728	6.117E-03
OS 2696(131)	4.36 3.34	1.777E-03	.0778	2.169E-03	.0949	2.438E-03	.1067	1.480E-03
NOT 4776(131)	4.36 3.34	1.777E-03	.0778	2.169E-03	.0949	2.438E-03	.1067	1.480E-03
NOS 9276(131)	4.36 3.34	1.777E-03	.0778	2.169E-03	.0949	2.438E-03	.1067	1.480E-03
TOF 7497(250)	5.43 4.42	6.427E-03	.2812	8.141E-03	.3562	9.397E-03	.4111	5.317E-03
OS 2697(131)	5.43 4.42	1.546E-03	.0676	1.886E-03	.0825	2.120E-03	.0928	1.287E-03
NOT 4777(131)	5.43 4.42	1.546E-03	.0676	1.886E-03	.0825	2.120E-03	.0928	1.287E-03
NOS 9277(131)	5.43 4.42	1.546E-03	.0676	1.886E-03	.0825	2.120E-03	.0928	1.287E-03
TOF 7498(250)	6.53 5.52	5.750E-03	.2517	7.264E-03	.3178	8.407E-03	.3680	4.761E-03
OS 2698(131)	6.53 5.52	1.383E-03	.0605	1.688E-03	.0739	1.897E-03	.0830	1.152E-03
NOT 4778(131)	6.53 5.52	1.383E-03	.0605	1.688E-03	.0739	1.897E-03	.0830	1.152E-03
NOS 9278(131)	6.53 5.52	1.383E-03	.0605	1.688E-03	.0739	1.897E-03	.0830	1.152E-03

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NASA-RI 0H50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA52E — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREREND	ROLL-MODEL	YAW
55	0	7.98	426.5	1299	40.01	12.99	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.6	.044	1.979	3802	3.940E-05	7.612E-08	1.968E 06	2.285E-02	1.921E-02

CAMERA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXR)	THAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	78	.0497	6.967E-02	6.5374E-02
OP SIDE(OS)	7906	131	78	.0497	6.967E-02	6.5374E-02
BOTTOM(BOT)	8176	131	78	.0497	6.967E-02	6.5374E-02
TOP(TOP)	7929	250	78	.0551	2.761E-01	2.4522E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
HOT 4779(131)	7.61	6.60	1.265E-03	.0553	1.344E-03	.0676	1.736E-03	.0759	1.053E-03
TOP 7699(250)	7.63	6.62	5.251E-03	.2297	6.651E-03	.2910	7.676E-03	.3358	4.343E-03
OS 7699(131)	7.63	6.62	1.263E-03	.0552	1.541E-03	.0674	1.732E-03	.0758	1.051E-03
NOS 7979(131)	7.63	6.62	1.263E-03	.0552	1.541E-03	.0674	1.732E-03	.0758	1.051E-03
TOP 7700(250)	8.71	7.70	4.878E-03	.2131	6.169E-03	.2699	7.120E-03	.3115	4.030E-03
OS 7700(131)	8.71	7.70	1.171E-03	.0512	1.429E-03	.0625	1.607E-03	.0703	9.753E-04
HOT 4780(131)	8.71	7.70	1.171E-03	.0512	1.429E-03	.0625	1.607E-03	.0703	9.753E-04
NOS 7980(131)	8.71	7.70	1.171E-03	.0512	1.429E-03	.0625	1.607E-03	.0703	9.753E-04
TOP 7701(250)	9.81	8.80	4.555E-03	.1992	5.770E-03	.2524	6.659E-03	.2913	3.767E-03
OS 7701(131)	9.81	8.80	1.095E-03	.0479	1.337E-03	.0585	1.503E-03	.0657	9.116E-04
HOT 4781(131)	9.81	8.80	1.095E-03	.0479	1.337E-03	.0585	1.503E-03	.0657	9.116E-04
NOS 7981(131)	9.81	8.80	1.095E-03	.0479	1.337E-03	.0585	1.503E-03	.0657	9.116E-04
TOP 7702(250)	10.89	9.88	4.299E-03	.1880	5.446E-03	.2382	6.286E-03	.2749	3.555E-03
OS 7702(131)	10.89	9.88	1.034E-03	.0452	1.262E-03	.0552	1.418E-03	.0620	8.603E-04
HOT 4782(131)	10.89	9.88	1.034E-03	.0452	1.262E-03	.0552	1.418E-03	.0620	8.603E-04
NOS 7982(131)	10.89	9.88	1.034E-03	.0452	1.262E-03	.0552	1.418E-03	.0620	8.603E-04
TOP 7703(250)	11.99	10.98	4.017E-03	.1784	5.166E-03	.2259	5.962E-03	.2608	3.372E-03
OS 7703(131)	11.99	10.98	9.207E-04	.0429	1.197E-03	.0524	1.345E-03	.0588	8.160E-04
HOT 4783(131)	11.99	10.98	9.207E-04	.0429	1.197E-03	.0524	1.345E-03	.0588	8.160E-04
NOS 7983(131)	11.99	10.98	9.207E-04	.0429	1.197E-03	.0524	1.345E-03	.0588	8.160E-04
HOT 4784(131)	13.07	12.05	9.359E-04	.0409	1.142E-03	.0500	1.284E-03	.0562	7.785E-04
TOP 7704(250)	13.09	12.08	3.688E-03	.1700	4.925E-03	.2154	5.644E-03	.2486	3.214E-03
OS 7704(131)	13.09	12.08	9.349E-04	.0409	1.141E-03	.0499	1.283E-03	.0561	7.777E-04
NOS 7984(131)	13.09	12.08	9.349E-04	.0409	1.141E-03	.0499	1.283E-03	.0561	7.777E-04
TOP 7705(250)	14.17	13.15	3.725E-03	.1629	4.719E-03	.2064	5.447E-03	.2382	3.079E-03
OS 7705(131)	14.17	13.15	8.958E-04	.0392	1.093E-03	.0478	1.229E-03	.0537	7.452E-04
HOT 4785(131)	14.17	13.15	8.958E-04	.0392	1.093E-03	.0478	1.229E-03	.0537	7.452E-04
NOS 7985(131)	14.17	13.15	8.958E-04	.0392	1.093E-03	.0478	1.229E-03	.0537	7.452E-04

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4/10/74

NASA-RT OH50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL R

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
55	0	7.98	427.2	1259	40.01	12.99	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
9a.5	.044	1.982	38U2	3.046E-05	7.612E-08	1.571E 06	2.287E-02	1.919E-02

CAMERA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	78	.0497	6.967E-02	6.5374E-02
UP SIDE(UPS)	7906	131	78	.0497	6.967E-02	6.5374E-02
BOTTOM(BOT)	8176	131	78	.0497	6.967E-02	6.5374E-02
TOP(TOP)	7529	250	78	.0551	2.761E-01	2.4522E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
NOT 4786(131)	15.24	14.23	8.613E-04	.0377	1.051E-03	.0460	1.182E-03	.0517	7.163E-04
TOP 7786(250)	15.27	14.26	3.579E-03	.1565	4.533E-03	.1982	5.232E-03	.2288	2.957E-03
OS 7786(131)	15.27	14.26	8.605E-04	.0376	1.050E-03	.0459	1.181E-03	.0516	7.157E-04
NOS 4786(131)	15.27	14.26	8.605E-04	.0376	1.050E-03	.0459	1.181E-03	.0516	7.157E-04
TOP 7787(250)	16.34	15.33	3.451E-03	.1509	4.371E-03	.1911	5.045E-03	.2206	2.852E-03
OS 7787(131)	16.34	15.33	8.298E-04	.0363	1.013E-03	.0443	1.138E-03	.0498	6.903E-04
NOT 4787(131)	16.34	15.33	8.298E-04	.0363	1.013E-03	.0443	1.138E-03	.0498	6.903E-04
NOS 4787(131)	16.34	15.33	8.298E-04	.0363	1.013E-03	.0443	1.138E-03	.0498	6.903E-04
TOP 7788(250)	17.45	16.43	3.333E-03	.1457	4.222E-03	.1846	4.873E-03	.2131	2.754E-03
OS 7788(131)	17.45	16.43	8.015E-04	.0350	9.783E-04	.0428	1.100E-03	.0481	6.666E-04
NOT 4788(131)	17.45	16.43	8.015E-04	.0350	9.783E-04	.0428	1.100E-03	.0481	6.666E-04
NOS 4788(131)	17.45	16.43	8.015E-04	.0350	9.783E-04	.0428	1.100E-03	.0481	6.666E-04
TOP 7789(250)	18.52	17.51	3.229E-03	.1412	4.090E-03	.1788	4.721E-03	.2064	2.668E-03
OS 7789(131)	18.52	17.51	7.765E-04	.0340	9.477E-04	.0414	1.065E-03	.0466	6.458E-04
NOT 4789(131)	18.52	17.51	7.765E-04	.0340	9.477E-04	.0414	1.065E-03	.0466	6.458E-04
NOS 4789(131)	18.52	17.51	7.765E-04	.0340	9.477E-04	.0414	1.065E-03	.0466	6.458E-04
TOP 7790(250)	19.62	18.61	3.132E-03	.1369	3.967E-03	.1735	4.579E-03	.2002	2.588E-03
OS 7790(131)	19.62	18.61	7.531E-04	.0329	9.193E-04	.0402	1.033E-03	.0452	6.264E-04
NOT 4790(131)	19.62	18.61	7.531E-04	.0329	9.193E-04	.0402	1.033E-03	.0452	6.264E-04
NOS 4790(131)	19.62	18.61	7.531E-04	.0329	9.193E-04	.0402	1.033E-03	.0452	6.264E-04
TOP 7791(250)	20.70	19.69	3.045E-03	.1331	3.857E-03	.1686	4.452E-03	.1946	2.515E-03
OS 7791(131)	20.70	19.69	7.323E-04	.0320	8.938E-04	.0391	1.005E-03	.0439	6.087E-04
NOT 4791(131)	20.70	19.69	7.323E-04	.0320	8.938E-04	.0391	1.005E-03	.0439	6.087E-04
NOS 4791(131)	20.70	19.69	7.323E-04	.0320	8.938E-04	.0391	1.005E-03	.0439	6.087E-04
TOP 7792(250)	21.80	20.79	2.968E-03	.1295	3.754E-03	.1641	4.333E-03	.1894	2.448E-03
OS 7792(131)	21.80	20.79	7.126E-04	.0312	8.698E-04	.0380	9.777E-04	.0427	5.924E-04
NOT 4792(131)	21.80	20.79	7.126E-04	.0312	8.698E-04	.0380	9.777E-04	.0427	5.924E-04
NOS 4792(131)	21.80	20.79	7.126E-04	.0312	8.698E-04	.0380	9.777E-04	.0427	5.924E-04

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4/10/74

NASA-AI OH50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA52E — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
55	0	7.98	427.5	1259	40.01	12.99	53.00	0	0

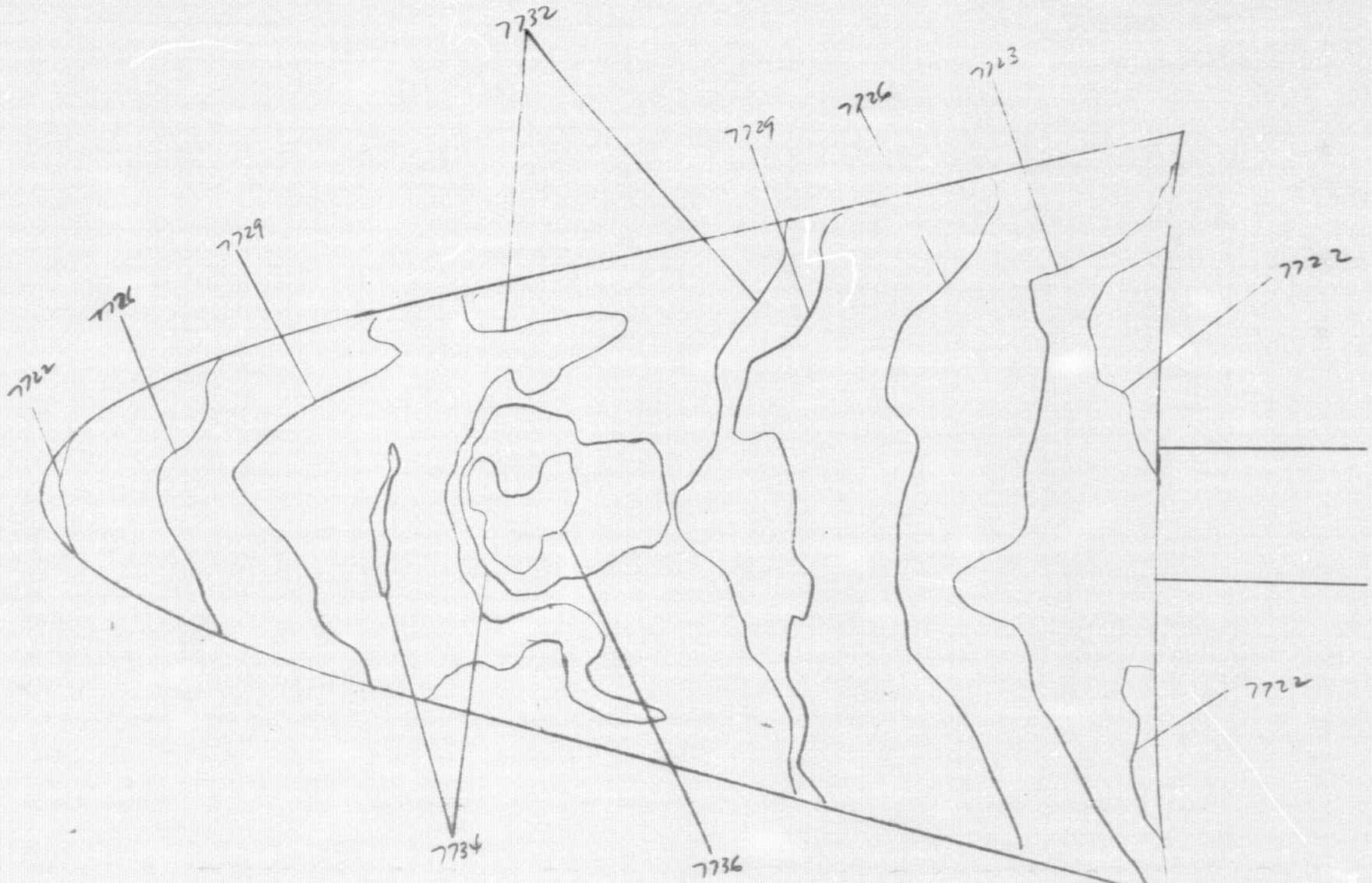
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.6	.0045	1.9-4	3812	3.949E-05	7.612E-08	1.972E 06	2.288E-02	1.919E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAK)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	78	.0497	6.967E-02	6.5374E-02
OP SIDE(OS)	7504	131	78	.0497	6.967E-02	6.5374E-02
BOTTOM(BOT)	8176	131	78	.0497	6.967E-02	6.5374E-02
TOP(TOP)	7529	250	78	.0551	2.261E-01	2.4522E-01

PIC NO	TIME DELTIVE		H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
BOT 4793(131)	22.88	21.86	6.949E-04	.0304	8.481E-04	.0371	9.533E-04	.0417	5.776E-04
TOP 7713(250)	22.98	21.89	2.888E-03	.1262	3.656E-03	.1599	4.222E-03	.1846	2.385E-03
OS 7713(131)	22.90	21.89	6.945E-04	.0304	8.476E-04	.0371	9.528E-04	.0417	5.773E-04
NOS 9293(131)	22.90	21.89	6.945E-04	.0304	8.476E-04	.0371	9.528E-04	.0417	5.773E-04
TOP 7714(250)	23.98	22.97	2.819E-03	.1233	3.571E-03	.1562	4.122E-03	.1802	2.329E-03
OS 7714(131)	23.98	22.97	6.780E-04	.0296	8.275E-04	.0362	9.302E-04	.0407	5.637E-04
BOT 4794(131)	23.98	22.97	6.780E-04	.0296	8.275E-04	.0362	9.302E-04	.0407	5.637E-04
NOS 9294(131)	23.98	22.97	6.780E-04	.0296	8.275E-04	.0362	9.302E-04	.0407	5.637E-04
TOP 7715(250)	25.08	24.07	2.754E-03	.1204	3.489E-03	.1525	4.027E-03	.1760	2.275E-03
OS 7715(131)	25.08	24.07	6.623E-04	.0290	8.089E-04	.0353	9.087E-04	.0397	5.506E-04
BOT 4795(131)	25.08	24.07	6.623E-04	.0290	8.089E-04	.0353	9.087E-04	.0397	5.506E-04
NOS 9295(131)	25.08	24.07	6.623E-04	.0290	8.089E-04	.0353	9.087E-04	.0397	5.506E-04
	25.30		MODEL HAS LEFT CENTERLINE						
TOP 7716(250)	26.15	25.14	2.695E-03	.1178	3.413E-03	.1492	3.940E-03	.1722	2.226E-03
OS 7716(131)	26.15	25.14	6.486E-04	.0283	7.904E-04	.0346	8.890E-04	.0389	5.388E-04
BOT 4796(131)	26.15	25.14	6.486E-04	.0283	7.904E-04	.0346	8.890E-04	.0389	5.388E-04
NOS 9296(131)	26.15	25.14	6.486E-04	.0283	7.904E-04	.0346	8.890E-04	.0389	5.388E-04
TOP 7717(250)	27.26	26.24	2.637E-03	.1153	3.341E-03	.1460	3.856E-03	.1685	2.178E-03
OS 7717(131)	27.26	26.24	6.342E-04	.0277	7.741E-04	.0338	8.702E-04	.0380	5.271E-04
BOT 4797(131)	27.26	26.24	6.342E-04	.0277	7.741E-04	.0338	8.702E-04	.0380	5.271E-04
NOS 9297(131)	27.26	26.24	6.342E-04	.0277	7.741E-04	.0338	8.702E-04	.0380	5.271E-04
BOT 4798(131)	28.33	27.32	6.216E-04	.0272	7.587E-04	.0332	8.528E-04	.0373	5.167E-04
TOP 7718(250)	28.36	27.35	2.584E-03	.1130	3.273E-03	.1431	3.778E-03	.1651	2.134E-03
OS 7718(131)	28.36	27.35	6.213E-04	.0272	7.584E-04	.0332	8.525E-04	.0373	5.165E-04
NOS 9298(131)	28.36	27.35	6.213E-04	.0272	7.584E-04	.0332	8.525E-04	.0373	5.165E-04

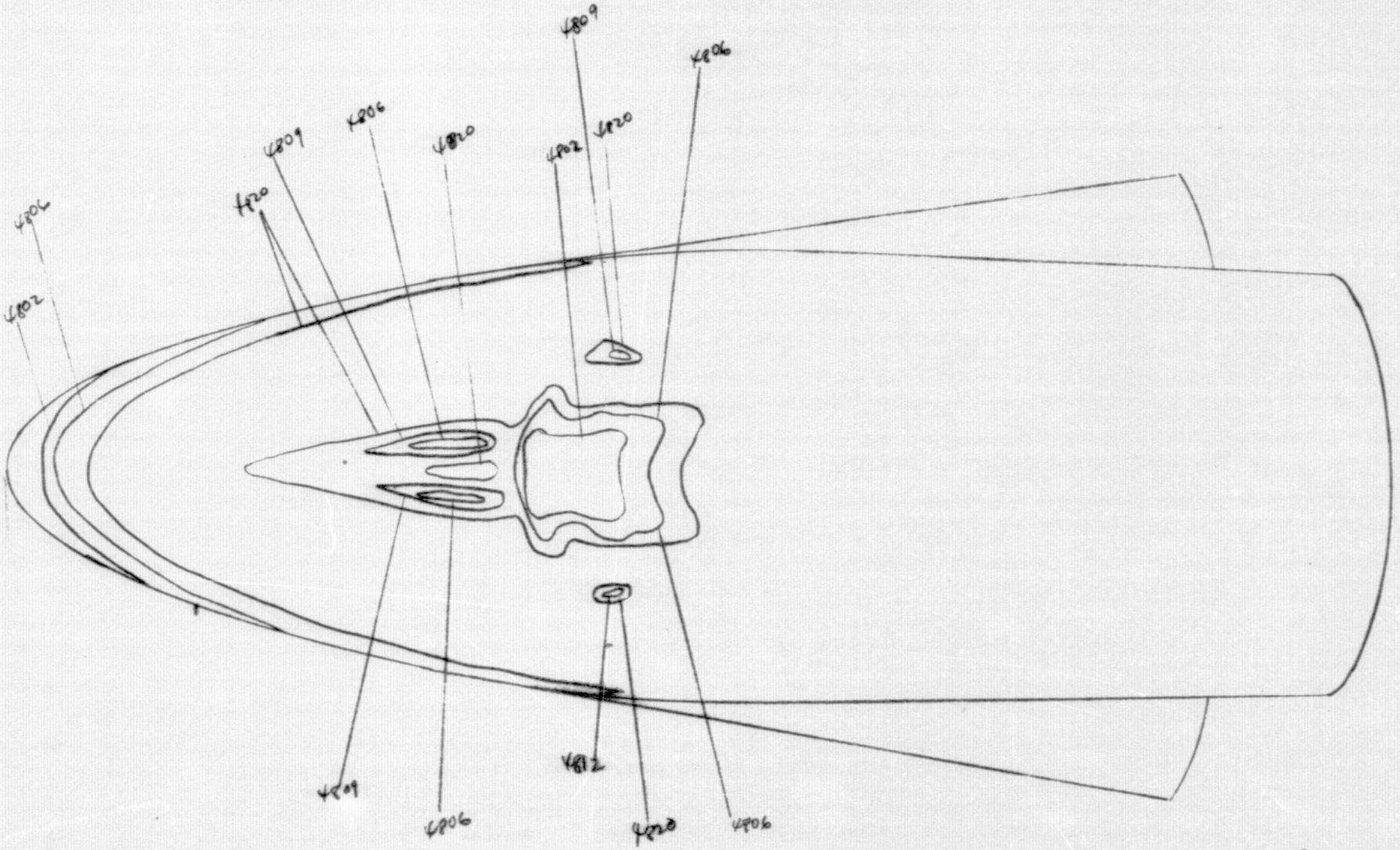
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OH-50A



GROUP 56
α: 45
ψ: 0

REPRODUCIBILITY OF THE



GROUP 56

α = 14

ϕ = 0

CONFIDENTIALITY OF THESE WORKS

NASA-RT OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VAS26 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
56	0	7.98	424.9	1297	45.00	8.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.044	1.972	3799	3.431E-05	7.600E-08	1.965E 06	2.280E-02	1.923E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAM)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	86	.0497	0	0
OP SIDE(OS)	7906	131	86	.0497	0	0
BOTTOM(BOT)	8176	131	86	.0497	0	0
TOP(TOP)	7529	275	86	.0560	0	0

PIC NO	TIME DELTIME		H(IO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TO 7719(275)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 7719(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 4795(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 9299(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
HO 4800(131)	1.08		MODEL HAS NOT REACHED CENTERLINE						
TO 7721(275)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 7721(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 9300(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.75								
TOP 7721(275)	2.16	1.19	1.439E-02	.6303	1.842E-02	.8073	2.144E-02	.9398	1.191E-02
OS 7721(131)	2.18	1.19	2.536E-03	.1112	3.098E-03	.1358	3.486E-03	.1528	2.118E-03
HOT 4801(131)	2.18	1.19	2.536E-03	.1112	3.098E-03	.1358	3.486E-03	.1528	2.118E-03
NOS 9301(131)	2.18	1.19	2.536E-03	.1112	3.098E-03	.1358	3.486E-03	.1528	2.118E-03
TOP 7722(275)	3.25	2.27	1.043E-02	.4571	1.335E-02	.5855	1.555E-02	.6815	8.639E-03
OS 7722(131)	3.25	2.27	1.836E-03	.0806	2.247E-03	.0985	2.528E-03	.1108	1.536E-03
HOT 4802(131)	3.25	2.27	1.836E-03	.0806	2.247E-03	.0985	2.528E-03	.1108	1.536E-03
NOS 9302(131)	3.25	2.27	1.836E-03	.0806	2.247E-03	.0985	2.528E-03	.1108	1.536E-03
HOT 4803(131)	4.33	3.35	1.615E-03	.0664	1.851E-03	.0811	2.082E-03	.0913	1.264E-03
TOP 7723(275)	4.36	3.37	8.556E-03	.3750	1.096E-02	.4803	1.276E-02	.5591	7.085E-03
OS 7723(131)	4.36	3.37	1.509E-03	.0662	1.844E-03	.0808	2.075E-03	.0909	1.260E-03
NOS 9303(131)	4.36	3.37	1.509E-03	.0662	1.844E-03	.0808	2.075E-03	.0909	1.260E-03
TOP 7724(275)	5.43	4.45	7.449E-03	.3265	9.541E-03	.4182	1.111E-02	.4868	6.170E-03
OS 7724(131)	5.43	4.45	1.314E-03	.0576	1.605E-03	.0704	1.806E-03	.0792	1.097E-03
HOT 4804(131)	5.43	4.45	1.314E-03	.0576	1.605E-03	.0704	1.806E-03	.0792	1.097E-03
NOS 9304(131)	5.43	4.45	1.314E-03	.0576	1.605E-03	.0704	1.806E-03	.0792	1.097E-03
TOP 7725(275)	6.53	5.55	6.669E-03	.2923	8.542E-03	.3744	9.943E-03	.4358	5.521E-03
OS 7725(131)	6.53	5.55	1.176E-03	.0516	1.437E-03	.0630	1.617E-03	.0709	9.817E-04
HOT 4805(131)	6.53	5.55	1.176E-03	.0516	1.437E-03	.0630	1.617E-03	.0709	9.817E-04
NOS 9305(131)	6.53	5.55	1.176E-03	.0516	1.437E-03	.0630	1.617E-03	.0709	9.817E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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4/10/74

NASA-RI OH5C — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA52e — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
56	0	7.98	425.6	1256	45.00	8.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.044	1.975	3799	3.938E-05	7.599E-08	1.969E 06	2.282E-02	1.921E-02

CAVITY	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCKK)	TRAP(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	86	.0497	5.955E-02	5.5761E-02
OP SIDE(OS)	7506	131	86	.0497	5.955E-02	5.5761E-02
BOTTOM(BOT)	8176	131	86	.0497	5.955E-02	5.5761E-02
TOP(TOP)	7529	275	86	.0560	2.518E-01	2.8052E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7726(275)	7.61	6.63	6.103E-03	.2675	7.817E-03	.3426	9.100E-03	.3988	5.053E-03
OS 2726(131)	7.61	6.63	1.077E-03	.0472	1.315E-03	.0576	1.480E-03	.0649	8.984E-04
BOT 4806(131)	7.61	6.63	1.077E-03	.0472	1.315E-03	.0576	1.480E-03	.0649	8.984E-04
NOS 9306(131)	7.61	6.63	1.077E-03	.0472	1.315E-03	.0576	1.480E-03	.0649	8.984E-04
TOP 7727(275)	8.71	7.73	5.952E-03	.2677	7.239E-03	.3172	8.426E-03	.3692	4.678E-03
OS 2727(131)	8.71	7.73	9.679E-04	.0437	1.218E-03	.0534	1.370E-03	.0601	8.317E-04
BOT 4807(131)	8.71	7.73	9.679E-04	.0437	1.218E-03	.0534	1.370E-03	.0601	8.317E-04
NOS 9307(131)	8.71	7.73	9.679E-04	.0437	1.218E-03	.0534	1.370E-03	.0601	8.317E-04
TOP 7728(275)	9.79	8.80	5.296E-03	.2321	6.782E-03	.2972	7.894E-03	.3460	4.384E-03
BOT 4808(131)	9.79	8.80	9.341E-04	.0409	1.141E-03	.0500	1.284E-03	.0563	7.794E-04
OS 2728(131)	9.81	8.83	9.329E-04	.0409	1.139E-03	.0499	1.282E-03	.0562	7.781E-04
NOS 9308(131)	9.81	8.83	9.329E-04	.0409	1.139E-03	.0499	1.282E-03	.0562	7.781E-04
TOP 7729(275)	10.89	9.90	4.892E-03	.2138	6.394E-03	.2802	7.443E-03	.3262	4.133E-03
OS 2729(131)	10.89	9.90	8.806E-04	.0386	1.076E-03	.0471	1.210E-03	.0531	7.347E-04
BOT 4809(131)	10.89	9.90	8.806E-04	.0386	1.076E-03	.0471	1.210E-03	.0531	7.347E-04
NOS 9309(131)	10.89	9.90	8.806E-04	.0386	1.076E-03	.0471	1.210E-03	.0531	7.347E-04
TOP 7730(275)	11.96	10.98	4.741E-03	.2077	6.072E-03	.2661	7.068E-03	.3097	3.924E-03
OS 2730(131)	11.96	10.98	8.363E-04	.0366	1.022E-03	.0448	1.150E-03	.0504	6.977E-04
BOT 4810(131)	11.99	11.01	8.354E-04	.0366	1.021E-03	.0447	1.148E-03	.0503	6.968E-04
NOS 9310(131)	11.99	11.01	8.354E-04	.0366	1.021E-03	.0447	1.148E-03	.0503	6.968E-04
TOP 7731(275)	13.07	12.08	4.520E-03	.1980	5.784E-03	.2537	6.739E-03	.2953	3.740E-03
OS 2731(131)	13.07	12.08	7.973E-04	.0349	9.740E-04	.0427	1.096E-03	.0480	6.649E-04
BOT 4811(131)	13.07	12.08	7.973E-04	.0349	9.740E-04	.0427	1.096E-03	.0480	6.649E-04
NOS 9311(131)	13.07	12.08	7.973E-04	.0349	9.740E-04	.0427	1.096E-03	.0480	6.649E-04
TOP 7732(275)	14.17	13.18	4.327E-03	.1896	5.542E-03	.2428	6.451E-03	.2827	3.580E-03
OS 2732(131)	14.17	13.18	7.633E-04	.0334	9.325E-04	.0409	1.049E-03	.0460	6.365E-04
BOT 4812(131)	14.17	13.18	7.633E-04	.0334	9.325E-04	.0409	1.049E-03	.0460	6.365E-04
NOS 9312(131)	14.17	13.19	7.633E-04	.0334	9.325E-04	.0409	1.049E-03	.0460	6.365E-04

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE

VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREHEND	ROLL-MODEL	YAW
56	0	7.98	425.8	1296	45.00	8.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
9.4	.044	1.978	3794	3.941E-05	7.598E-08	1.870E 06	2.282E-02	1.924E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACAK)	THAR(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	86	.0497	5.955E-02	5.5761E-02
OP SIDE(OS)	7906	131	86	.0497	5.955E-02	5.5761E-02
BOTTOM(BOT)	8176	131	86	.0497	5.955E-02	5.5761E-02
TOP(TOP)	7929	275	86	.0560	2.518E-01	2.8052E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7733(275)	15.24	14.26	4.166E-03	.1823	5.329E-03	.2335	6.203E-03	.2718	3.442E-03
OS 2733(131)	15.24	14.26	7.333E-04	.0322	8.966E-04	.0393	1.009E-03	.0442	6.119E-04
HOT 4813(131)	15.24	14.26	7.339E-04	.0322	8.966E-04	.0393	1.009E-03	.0442	6.119E-04
NOS 9313(131)	15.24	14.26	7.339E-04	.0322	8.966E-04	.0393	1.009E-03	.0442	6.119E-04
TOP 7734(275)	16.34	15.36	4.004E-03	.1756	5.134E-03	.2249	5.476E-03	.2618	3.316E-03
OS 2734(131)	16.34	15.36	7.271E-04	.0318	8.639E-04	.0378	9.720E-04	.0426	5.896E-04
HOT 4814(131)	16.34	15.36	7.271E-04	.0318	8.639E-04	.0378	9.720E-04	.0426	5.896E-04
NOS 9314(131)	16.34	15.36	7.271E-04	.0318	8.639E-04	.0378	9.720E-04	.0426	5.896E-04
OS 2735(131)	17.42	16.44	6.836E-04	.0299	8.351E-04	.0366	9.396E-04	.0412	5.699E-04
HOT 4815(131)	17.42	16.44	6.836E-04	.0299	8.351E-04	.0366	9.396E-04	.0412	5.699E-04
TOP 7735(275)	17.45	16.46	3.972E-03	.1696	4.959E-03	.2173	5.773E-03	.2529	3.203E-03
NOS 9315(131)	17.45	16.46	6.831E-04	.0299	8.345E-04	.0366	9.389E-04	.0411	5.694E-04
TOP 7736(275)	18.52	17.54	3.751E-03	.1643	4.805E-03	.2105	5.593E-03	.2450	3.103E-03
OS 2736(131)	18.52	17.54	6.818E-04	.0298	8.284E-04	.0363	9.096E-04	.0398	5.516E-04
HOT 4816(131)	18.52	17.54	6.818E-04	.0298	8.284E-04	.0363	9.096E-04	.0398	5.516E-04
NOS 9316(131)	18.52	17.54	6.818E-04	.0298	8.284E-04	.0363	9.096E-04	.0398	5.516E-04
TOP 7737(275)	19.62	18.64	3.633E-03	.1590	4.661E-03	.2042	5.425E-03	.2377	3.009E-03
OS 2737(131)	19.62	18.64	6.419E-04	.0281	7.842E-04	.0344	8.823E-04	.0387	5.351E-04
HOT 4817(131)	19.62	18.64	6.419E-04	.0281	7.842E-04	.0344	8.823E-04	.0387	5.351E-04
NOS 9317(131)	19.62	18.64	6.419E-04	.0281	7.842E-04	.0344	8.823E-04	.0387	5.351E-04
TOP 7738(275)	20.70	19.72	3.638E-03	.1550	4.532E-03	.1985	5.275E-03	.2311	2.926E-03
OS 2738(131)	20.70	19.72	6.241E-04	.0273	7.625E-04	.0334	8.579E-04	.0376	5.203E-04
HOT 4818(131)	20.70	19.72	6.241E-04	.0273	7.625E-04	.0334	8.579E-04	.0376	5.203E-04
NOS 9318(131)	20.70	19.72	6.241E-04	.0273	7.625E-04	.0334	8.579E-04	.0376	5.203E-04
TOP 7739(275)	21.80	20.82	3.443E-03	.1508	4.410E-03	.1932	5.134E-03	.2249	2.847E-03
OS 2739(131)	21.80	20.82	6.074E-04	.0266	7.421E-04	.0325	8.349E-04	.0366	5.062E-04
HOT 4819(131)	21.80	20.82	6.074E-04	.0266	7.421E-04	.0325	8.349E-04	.0366	5.062E-04
NOS 9319(131)	21.80	20.82	6.074E-04	.0266	7.421E-04	.0325	8.349E-04	.0366	5.062E-04

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4/10/74

NASA-RT OH5C — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE
VAS2E — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
56	0	7.98	426.1	1296	45.00	9.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.4	.044	1.977	3799	3.943E-05	7.594E-08	1.571E 06	2.283E-02	1.919E-02

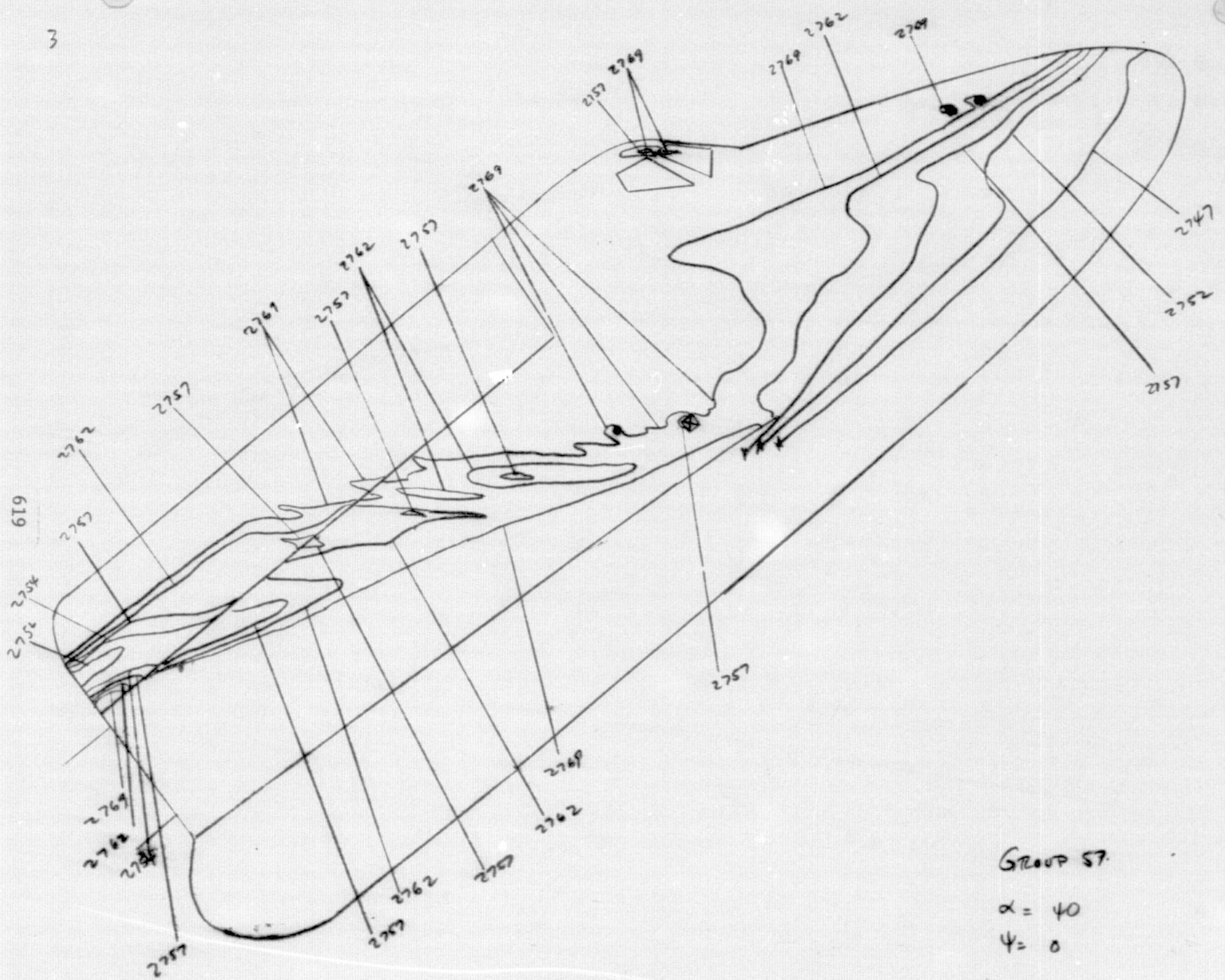
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACRA)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	86	.0497	5.955E-02	5.5761E-02
OP SIDE(OS)	7906	131	86	.0497	5.955E-02	5.5761E-02
HOTTOM(BOT)	8176	131	86	.0497	5.955E-02	5.5761E-02
TOP(TOP)	7529	275	86	.0560	2.518E-01	2.8052E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7740(275)	22.88	21.89	3.357E-03	.1471	4.300E-03	.1884	5.006E-03	.2193	2.776E-03
OS 2740(131)	22.88	21.89	5.423E-04	.0259	7.236E-04	.0317	8.141E-04	.0357	4.936E-04
HOT 4820(131)	22.88	21.89	5.423E-04	.0259	7.236E-04	.0317	8.141E-04	.0357	4.936E-04
NOS 9320(131)	22.88	21.89	5.423E-04	.0259	7.236E-04	.0317	8.141E-04	.0357	4.936E-04
TOP 7741(275)	23.94	22.99	3.276E-03	.1435	4.196E-03	.1838	4.884E-03	.2139	2.709E-03
OS 2741(131)	23.99	22.99	5.779E-04	.0253	7.060E-04	.0309	7.944E-04	.0348	4.816E-04
HOT 4821(131)	23.98	22.99	5.779E-04	.0253	7.060E-04	.0309	7.944E-04	.0348	4.816E-04
NOS 9321(131)	23.98	22.99	5.779E-04	.0253	7.060E-04	.0309	7.944E-04	.0348	4.816E-04
TOP 7742(275)	25.05	24.07	3.207E-03	.1403	4.101E-03	.1797	4.774E-03	.2091	2.648E-03
OS 2742(131)	25.05	24.07	5.549E-04	.0247	6.901E-04	.0302	7.764E-04	.0340	4.709E-04
HOT 4822(131)	25.05	24.07	5.549E-04	.0247	6.901E-04	.0302	7.764E-04	.0340	4.709E-04
NOS 9322(131)	25.05	24.10	5.546E-04	.0247	6.897E-04	.0302	7.760E-04	.0340	4.705E-04
	25.65		MODEL HAS LEFT CENTERLINE						
TOP 7743(275)	26.14	25.17	3.131E-03	.1371	4.011E-03	.1757	4.668E-03	.2045	2.589E-03
OS 2743(131)	26.14	25.17	5.524E-04	.0242	6.748E-04	.0296	7.593E-04	.0333	4.603E-04
HOT 4823(131)	26.16	25.17	5.524E-04	.0242	6.748E-04	.0296	7.593E-04	.0333	4.603E-04
NOS 9323(131)	26.16	25.17	5.524E-04	.0242	6.748E-04	.0296	7.593E-04	.0333	4.603E-04

GROUP 57
α = 40
ψ = 0

618

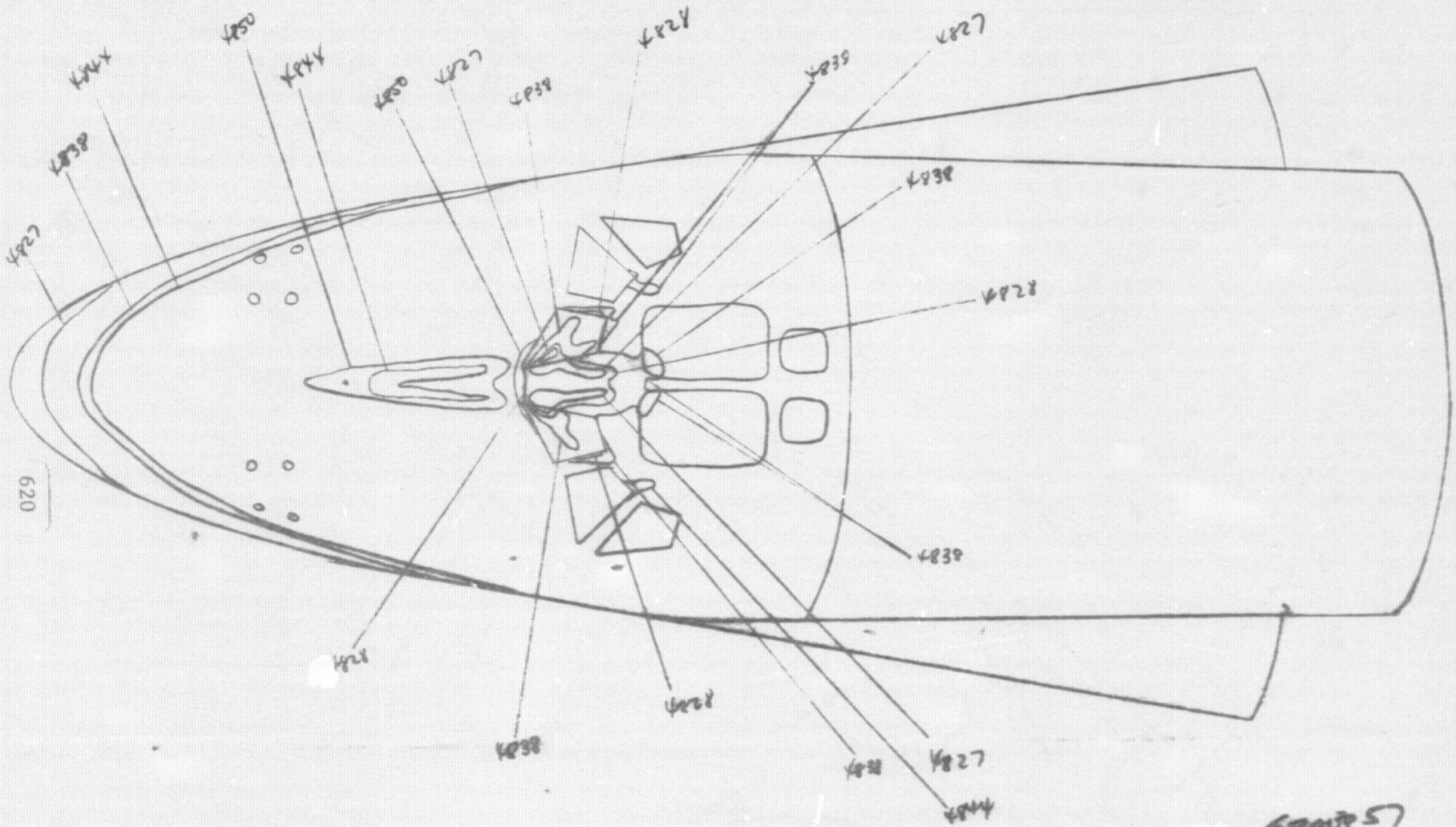
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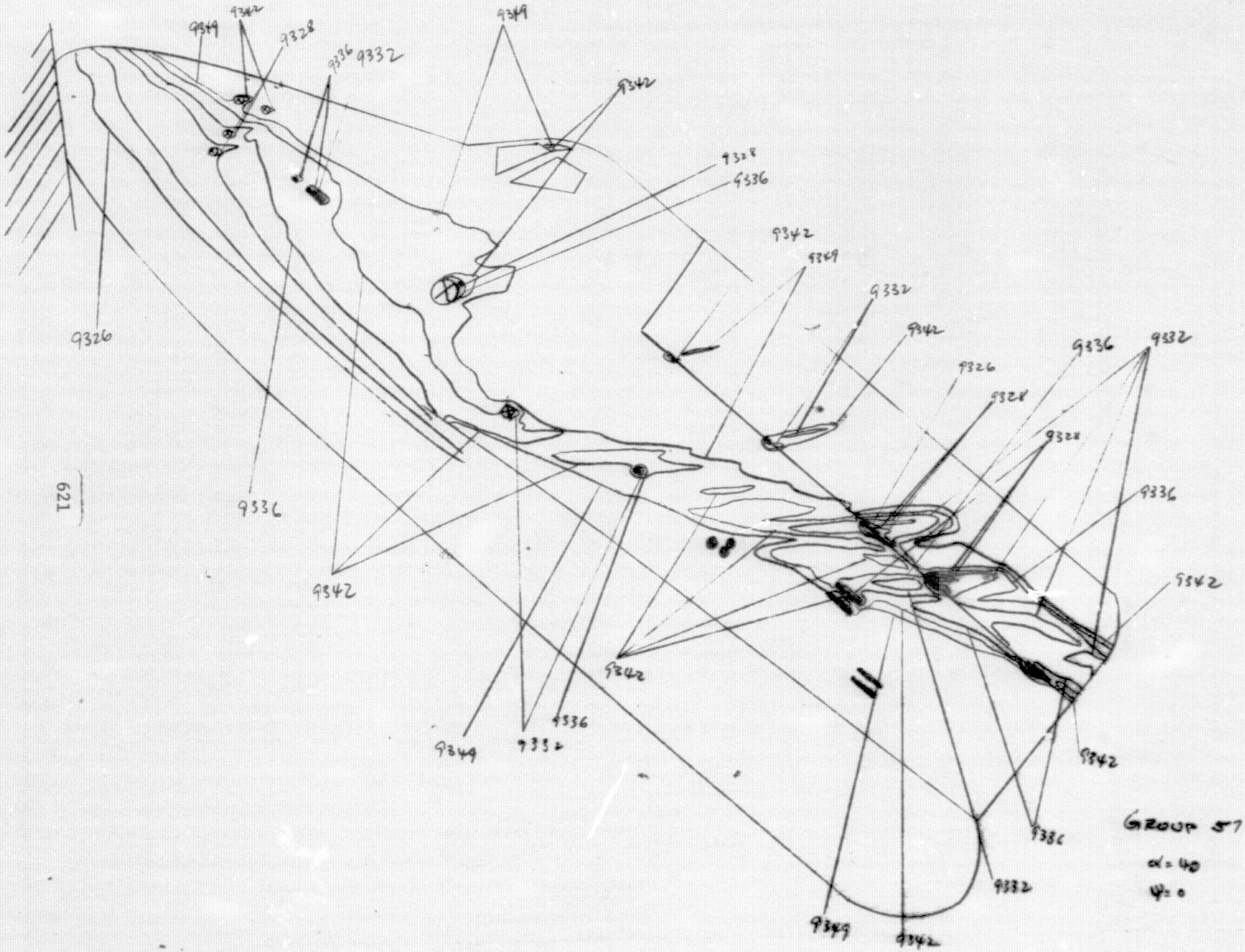
GROUP 57

$\alpha = 40$

$\psi = 0$



GROUP 57
1-40
#2 0


9349
9342
9328
9336
9332
9342
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9328
9336
9342
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9332
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9326
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9332
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9328
9336
9342
9342
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9342
9349
9332
9336
9342
9336
9332
9349
9342
621
GROUP 57
α = 40
ψ = 0

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4/10/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VAS26 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
57	0	7.96	425.2	1292	40.02	12.98	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.644	1.973	3742.	3.947E-05	7.576E-08	1.976E 06	2.279E-02	1.918E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	NOSE ROOT (RHOXCXK)	TPAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	83	.0497		0
OP SIDE(OS)	7906	131	83	.0497	0	0
MOTION(MOT)	8176	131	83	.0497	0	0
TOP(TOP)	7929	350	83	.0579	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
TO 7744(350)	.05		MODEL HAS NOT REACHED CENTERLINE						
OS 2744(131)	.05		MODEL HAS NOT REACHED CENTERLINE						
MO 4824(131)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 9324(131)	.05		MODEL HAS NOT REACHED CENTERLINE						
MO 4825(131)	1.10		MODEL HAS NOT REACHED CENTERLINE						
TO 7745(350)	1.13		MODEL HAS NOT REACHED CENTERLINE						
OS 2745(131)	1.13		MODEL HAS NOT REACHED CENTERLINE						
NO 9325(131)	1.13		MODEL HAS NOT REACHED CENTERLINE						
INFECT TIME =	1.8'								
TOP 7746(350)	2.20	1.19	2.373E-02	1.2403	3.162E-02	1.3865	3.802E-02	1.6669	1.954E-02
OS 2746(131)	2.20	1.19	2.722E-03	.1193	3.327E-03	.1458	3.744E-03	.1641	2.268E-03
MOT 4826(131)	2.20	1.19	2.722E-03	.1193	3.327E-03	.1458	3.744E-03	.1641	2.268E-03
NOS 9326(131)	2.20	1.19	2.722E-03	.1193	3.327E-03	.1458	3.744E-03	.1641	2.268E-03
TOP 7747(350)	3.28	2.27	1.729E-02	.7541	2.292E-02	1.0050	2.755E-02	1.2082	1.416E-02
OS 2747(131)	3.28	2.27	1.973E-03	.0865	2.411E-03	.1057	2.713E-03	.1190	1.644E-03
MOT 4827(131)	3.28	2.27	1.973E-03	.0865	2.411E-03	.1057	2.713E-03	.1190	1.644E-03
NOS 9327(131)	3.28	2.27	1.973E-03	.0865	2.411E-03	.1057	2.713E-03	.1190	1.644E-03
TOP 7748(350)	4.38	3.37	1.411E-02	.6185	1.880E-02	.8243	2.201E-02	.9910	1.161E-02
OS 2748(131)	4.38	3.37	1.618E-03	.0710	1.978E-03	.0867	2.276E-03	.0976	1.348E-03
MOT 4828(131)	4.38	3.37	1.618E-03	.0710	1.978E-03	.0867	2.276E-03	.0976	1.348E-03
NOS 9328(131)	4.38	3.37	1.618E-03	.0710	1.978E-03	.0867	2.276E-03	.0976	1.348E-03
TOP 7749(350)	5.46	4.44	1.229E-02	.5384	1.637E-02	.7176	1.968E-02	.8627	1.011E-02
OS 2749(131)	5.46	4.44	1.409E-03	.0618	1.722E-03	.0755	1.938E-03	.0849	1.174E-03
MOT 4829(131)	5.46	4.44	1.409E-03	.0618	1.722E-03	.0755	1.938E-03	.0849	1.174E-03
NOS 9329(131)	5.46	4.44	1.409E-03	.0618	1.722E-03	.0755	1.938E-03	.0849	1.174E-03
TOP 7750(350)	6.56	5.55	1.105E-02	.4820	1.465E-02	.6423	1.762E-02	.7722	9.049E-03
OS 2750(131)	6.56	5.55	1.261E-03	.0553	1.542E-03	.0676	1.735E-03	.0760	1.050E-03
MOT 4830(131)	6.56	5.55	1.261E-03	.0553	1.542E-03	.0676	1.735E-03	.0760	1.050E-03
NOS 9330(131)	6.56	5.55	1.261E-03	.0553	1.542E-03	.0676	1.735E-03	.0760	1.050E-03

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VAS2E — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTCH	ALPHA-PREBEND	ROLL-MODEL	YAW
57	0	7.98	425.9	1293	40.02	17.98	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	PE/FT (FT-1)	RREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.044	1.476	3793	3.953E-05	7.577E-08	1.974E 06	2.281E-02	1.917E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCKR)	THAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	83	.0497	6.404E-02	5.9767E-02
UP SIDE(US)	7506	131	83	.0497	6.404E-02	5.9767E-02
BOTTOM(BOT)	8176	131	83	.0497	6.404E-02	5.9767E-02
TOP(TOP)	7529	350	83	.0579	3.562E-01	4.4721E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
HOT 4831(131)	7.63	6.62	1.154E-03	.0506	1.411E-03	.0618	1.588E-03	.0696	9.608E-04
NOS 9331(131)	7.62	6.62	1.154E-03	.0506	1.411E-03	.0618	1.588E-03	.0696	9.608E-04
TOP 7751(350)	7.65	6.65	1.004E-02	.4402	1.339E-02	.5867	1.609E-02	.7054	8.265E-03
US 2751(131)	7.66	6.65	1.152E-03	.0505	1.408E-03	.0617	1.585E-03	.0695	9.594E-04
TOP 7752(350)	8.74	7.72	9.317E-03	.4083	1.242E-02	.5442	1.493E-02	.6542	7.664E-03
US 2752(131)	8.74	7.72	1.069E-03	.0468	1.306E-03	.0572	1.470E-03	.0644	8.897E-04
HOT 4832(131)	8.74	7.72	1.069E-03	.0468	1.306E-03	.0572	1.470E-03	.0644	8.897E-04
NOS 9332(131)	8.74	7.72	1.069E-03	.0468	1.306E-03	.0572	1.470E-03	.0644	8.897E-04
TOP 7753(350)	9.81	8.80	8.729E-03	.3826	1.163E-02	.5099	1.349E-02	.6130	7.182E-03
US 2753(131)	9.81	8.80	1.001E-03	.0439	1.224E-03	.0536	1.377E-03	.0604	8.337E-04
HOT 4833(131)	9.81	8.80	1.001E-03	.0439	1.224E-03	.0536	1.377E-03	.0604	8.337E-04
NOS 9333(131)	9.81	8.80	1.001E-03	.0439	1.224E-03	.0536	1.377E-03	.0604	8.337E-04
TOP 7754(350)	10.91	9.90	8.229E-03	.3607	1.097E-02	.4807	1.319E-02	.5779	6.772E-03
US 2754(131)	10.91	9.90	9.440E-04	.0414	1.154E-03	.0506	1.298E-03	.0569	7.861E-04
HOT 4834(131)	10.91	9.90	9.440E-04	.0414	1.154E-03	.0506	1.298E-03	.0569	7.861E-04
NOS 9334(131)	10.91	9.90	9.440E-04	.0414	1.154E-03	.0506	1.298E-03	.0569	7.861E-04
HOT 4835(131)	11.99	10.98	8.965E-04	.0393	1.096E-03	.0480	1.233E-03	.0540	7.456E-04
TOP 7755(350)	12.01	11.00	7.602E-03	.3620	1.060E-02	.4558	1.251E-02	.5479	6.417E-03
US 2755(131)	12.01	11.00	8.955E-04	.0392	1.094E-03	.0479	1.232E-03	.0540	7.449E-04
NOS 9335(131)	12.01	11.00	8.955E-04	.0392	1.094E-03	.0479	1.232E-03	.0540	7.449E-04
TOP 7756(350)	13.09	12.08	7.450E-03	.3265	9.930E-03	.4351	1.194E-02	.5231	6.127E-03
US 2756(131)	13.09	12.08	8.047E-04	.0375	1.045E-03	.0458	1.175E-03	.0515	7.113E-04
HOT 4836(131)	13.09	12.08	8.047E-04	.0375	1.045E-03	.0458	1.175E-03	.0515	7.113E-04
NOS 9336(131)	13.09	12.08	8.047E-04	.0375	1.045E-03	.0458	1.175E-03	.0515	7.113E-04
TOP 7757(350)	14.19	13.18	7.132E-03	.3125	9.506E-03	.4165	1.143E-02	.5008	5.866E-03
US 2757(131)	14.19	13.18	8.182E-04	.0359	9.999E-04	.0438	1.125E-03	.0493	6.809E-04
HOT 4837(131)	14.19	13.18	8.182E-04	.0359	9.999E-04	.0438	1.125E-03	.0493	6.809E-04
NOS 9337(131)	14.19	13.18	8.182E-04	.0359	9.999E-04	.0438	1.125E-03	.0493	6.809E-04

NASA-RI OHSO — AEDC(AHO-INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VASP6 — 50 INCH HYPERSONIC TUNNEL B

GRCUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
57	0	7.98	426.7	1293	40.02	12.98	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	PE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.044	1.978	3793	3.966E-05	7.576E-08	1.580E 06	2.282E-02	1.916E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	THAR(TO)	BETA(TO)
NOF SIDE(NOS)	7576	131	83	.0497	6.404E-02	5.9767E-02
OP SIDE(OS)	7906	131	83	.0497	6.404E-02	5.9767E-02
BOTTOM(BOT)	8176	131	83	.0497	6.404E-02	5.9767E-02
TOP(TOP)	7929	350	83	.0579	3.562E-01	4.4721E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
BOT 4839(131)	15.27	14.26	7.867E-04	.0345	9.615E-04	.0421	1.082E-03	.0474	6.545E-04
TOP 7758(350)	15.29	14.28	6.852E-03	.3002	9.132E-03	.4002	1.098E-02	.4811	5.635E-03
OS 7758(131)	15.29	14.28	7.867E-04	.0344	9.606E-04	.0421	1.081E-03	.0474	6.541E-04
NOS 8338(131)	15.29	14.28	7.860E-04	.0344	9.606E-04	.0421	1.081E-03	.0474	6.541E-04
TOP 7759(350)	16.37	15.36	6.607E-03	.2894	8.806E-03	.3857	1.059E-02	.4637	5.429E-03
OS 7759(131)	16.37	15.36	7.558E-04	.0332	9.263E-04	.0406	1.042E-03	.0457	6.302E-04
BOT 4839(131)	16.37	15.36	7.587E-04	.0332	9.263E-04	.0406	1.042E-03	.0457	6.302E-04
NOS 8339(131)	16.37	15.36	7.587E-04	.0332	9.263E-04	.0406	1.042E-03	.0457	6.302E-04
TOP 7760(350)	17.47	16.46	6.283E-03	.2795	8.507E-03	.3726	1.023E-02	.4479	5.244E-03
OS 7760(131)	17.47	16.46	7.322E-04	.0321	8.968E-04	.0392	1.007E-03	.0441	6.088E-04
BOT 4840(131)	17.47	16.46	7.322E-04	.0321	8.968E-04	.0392	1.007E-03	.0441	6.088E-04
NOS 8340(131)	17.47	16.46	7.322E-04	.0321	8.968E-04	.0392	1.007E-03	.0441	6.088E-04
OS 7761(131)	18.55	17.53	7.094E-04	.0311	8.669E-04	.0380	9.756E-04	.0427	5.899E-04
BOT 4841(131)	18.55	17.53	7.094E-04	.0311	8.669E-04	.0380	9.756E-04	.0427	5.899E-04
TOP 7761(350)	18.57	17.56	6.179E-03	.2707	8.236E-03	.3607	9.901E-03	.4337	5.078E-03
NOS 8341(131)	18.57	17.56	7.099E-04	.0310	8.663E-04	.0379	9.749E-04	.0427	5.895E-04
TOP 7762(350)	19.65	18.64	5.948E-03	.2607	7.994E-03	.3502	9.610E-03	.4210	4.929E-03
OS 7762(131)	19.65	18.64	6.881E-04	.0301	8.409E-04	.0368	9.463E-04	.0415	5.722E-04
BOT 4842(131)	19.65	18.64	6.881E-04	.0301	8.409E-04	.0368	9.463E-04	.0415	5.722E-04
NOS 8342(131)	19.65	18.64	6.881E-04	.0301	8.409E-04	.0368	9.463E-04	.0415	5.722E-04
BOT 4843(131)	20.72	19.71	6.690E-04	.0293	8.176E-04	.0358	9.201E-04	.0403	5.562E-04
TOP 7763(350)	20.75	19.74	5.828E-03	.2552	7.768E-03	.3402	9.339E-03	.4090	4.798E-03
OS 7763(131)	20.75	19.74	6.686E-04	.0293	8.171E-04	.0358	9.195E-04	.0403	5.558E-04
NOS 8343(131)	20.75	19.74	6.686E-04	.0293	8.171E-04	.0358	9.195E-04	.0403	5.558E-04
TOP 7764(350)	21.83	20.81	5.674E-03	.2485	7.564E-03	.3313	9.094E-03	.3982	4.662E-03
OS 7764(131)	21.83	20.81	6.511E-04	.0285	7.957E-04	.0348	8.955E-04	.0392	5.412E-04
BOT 4844(131)	21.83	20.81	6.511E-04	.0285	7.957E-04	.0348	8.955E-04	.0392	5.412E-04
NOS 8344(131)	21.83	20.81	6.511E-04	.0285	7.957E-04	.0348	8.955E-04	.0392	5.412E-04

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REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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4/10/74

NASA-PI 0H50 — AEDC(APO,INC.) ARNOLD AFS, TENNESSEE

VA526 — VON KARMAN GAS DYNAMICS FACILITY

50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREWIND	ROLL-MODEL	YAW
57	0	7.98	426.7	1293	40.02	12.98	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.1	.048	1.492	3793	3.484E-05	7.577E-08	1.683E 06	2.294E-02	1.915E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCAK)	TRAN(TO)	BETA(TO)
NOR SIDE(NOS)	7576	131	83	.0497	6.404E-02	5.9767E-02
OP SIDE(OS)	7906	131	83	.0497	6.404E-02	5.9767E-02
BOTTOM(BOT)	8176	131	83	.0497	6.404E-02	5.9767E-02
TOP(TOP)	7529	350	83	.0579	3.562E-01	4.4721E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.910)	H(.910)/HREF	H(.934TO)	H(.934TO)/HREF	ST(TO)
TOP 7765(350)	22.93	21.91	5.531E-03	.2422	7.372E-03	.3228	8.962E-03	.3881	4.543E-03
OS 2765(131)	22.93	21.91	6.245E-04	.0278	7.755E-04	.0340	8.727E-04	.0382	5.273E-04
HOT 4845(131)	22.93	21.91	6.345E-04	.0278	7.755E-04	.0340	8.727E-04	.0382	5.273E-04
NOS 5345(131)	22.93	21.91	6.345E-04	.0278	7.755E-04	.0340	8.727E-04	.0382	5.273E-04
TOP 7766(350)	24.00	22.99	5.400E-03	.2365	7.197E-03	.3151	8.653E-03	.3789	4.435E-03
OS 2766(131)	24.00	22.99	6.195E-04	.0271	7.571E-04	.0332	8.520E-04	.0373	5.148E-04
HOT 4846(131)	24.00	22.99	6.195E-04	.0271	7.571E-04	.0332	8.520E-04	.0373	5.148E-04
NOS 5346(131)	24.00	22.99	6.195E-04	.0271	7.571E-04	.0332	8.520E-04	.0373	5.148E-04
TOP 7767(350)	25.10	24.09	5.275E-03	.2309	7.031E-03	.3078	8.452E-03	.3700	4.331E-03
OS 2767(131)	25.10	24.09	6.052E-04	.0265	7.396E-04	.0324	8.323E-04	.0364	5.027E-04
HOT 4847(131)	25.10	24.09	6.052E-04	.0265	7.396E-04	.0324	8.323E-04	.0364	5.027E-04
NOS 5347(131)	25.10	24.09	6.052E-04	.0265	7.396E-04	.0324	8.323E-04	.0364	5.027E-04
HOT 4848(131)	26.18	25.17	5.921E-04	.0259	7.236E-04	.0317	8.143E-04	.0357	4.919E-04
TOP 7768(350)	26.21	25.19	5.152E-03	.2258	6.870E-03	.3010	8.266E-03	.3618	4.235E-03
OS 2768(131)	26.21	25.19	5.918E-04	.0259	7.232E-04	.0317	8.139E-04	.0356	4.916E-04
NOS 5348(131)	26.21	25.19	5.918E-04	.0259	7.232E-04	.0317	8.139E-04	.0356	4.916E-04
TOP 7769(350)	27.28	26.27	5.052E-03	.2211	6.733E-03	.2947	8.095E-03	.3543	4.146E-03
OS 2769(131)	27.29	26.27	5.795E-04	.0254	7.083E-04	.0310	7.971E-04	.0349	4.813E-04
HOT 4849(131)	27.28	26.27	5.795E-04	.0254	7.083E-04	.0310	7.971E-04	.0349	4.813E-04
NOS 5349(131)	27.28	26.27	5.795E-04	.0254	7.083E-04	.0310	7.971E-04	.0349	4.813E-04
TOP 7770(350)	28.34	27.32	4.949E-03	.2166	6.596E-03	.2887	7.930E-03	.3471	4.062E-03
OS 2770(131)	28.38	27.37	5.672E-04	.0249	6.939E-04	.0304	7.809E-04	.0342	4.715E-04
HOT 4850(131)	28.38	27.37	5.672E-04	.0249	6.939E-04	.0304	7.809E-04	.0342	4.715E-04
NOS 5350(131)	28.38	27.37	5.672E-04	.0249	6.939E-04	.0304	7.809E-04	.0342	4.715E-04
	28.66		MODEL HAS LEFT CENTERLINE						

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4/10/74

NASA-RT OHEB — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	P0(PSIA)	T0(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
57	A	7.98	427.1	1293	40.02	12.98	53.00	0	0

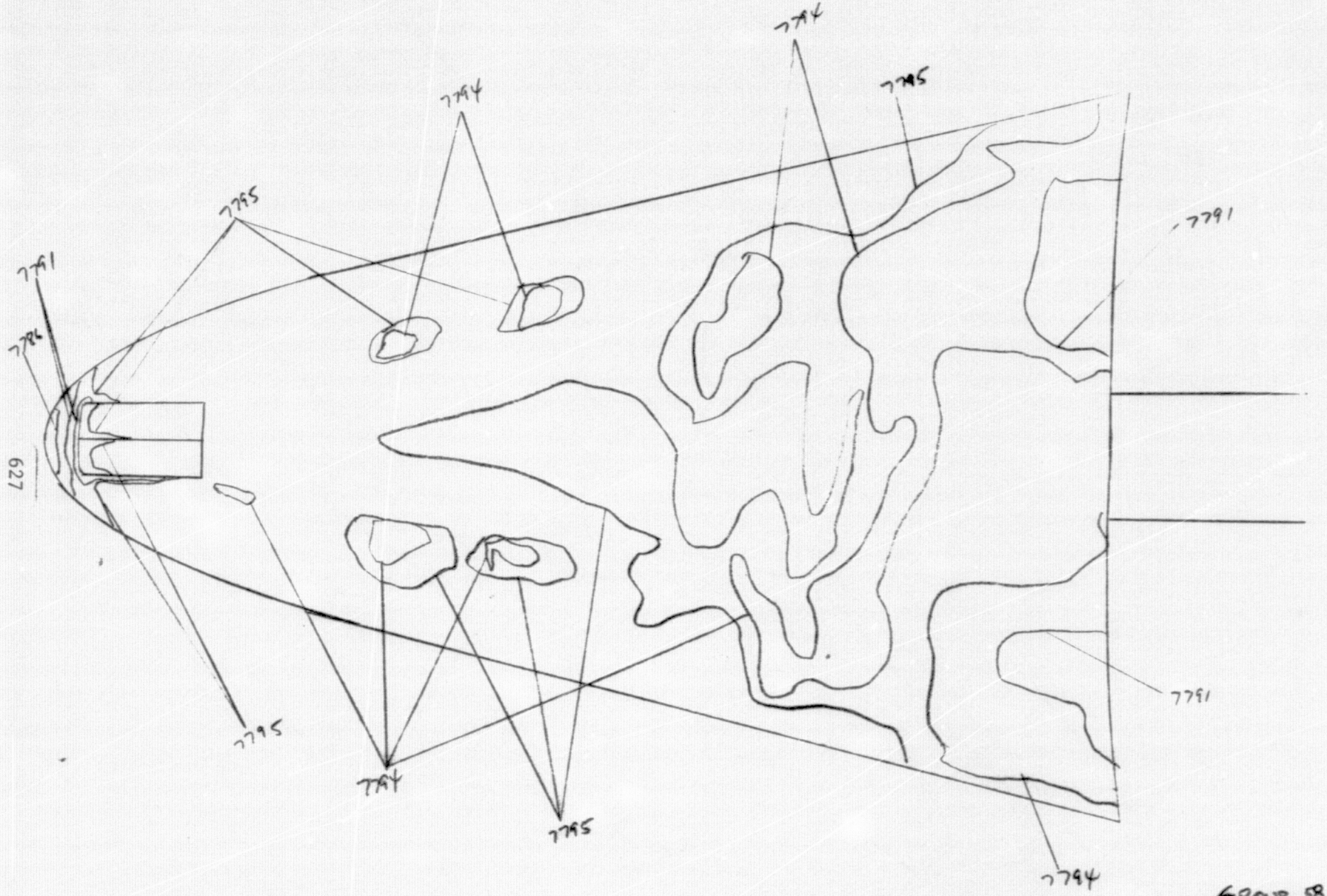
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (RE= .04 FT)	SIREF (RE= .04 FT)
94.1	.044	1.962	3792	3.443E-05	7.577E-08	1.584E 06	2.285E-02	1.914E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAM)	THAR(TO)	BETA(TO)
NOP SIDE(NOS)	7576	131	83	.0497	6.404E-02	5.9767E-02
UP SIDE(US)	7906	131	83	.0497	6.404E-02	5.9767E-02
BOTTOM(BOT)	8176	131	83	.0497	6.404E-02	5.9767E-02
TOP(TOP)	7929	350	83	.0579	3.562E-01	4.4721E-01

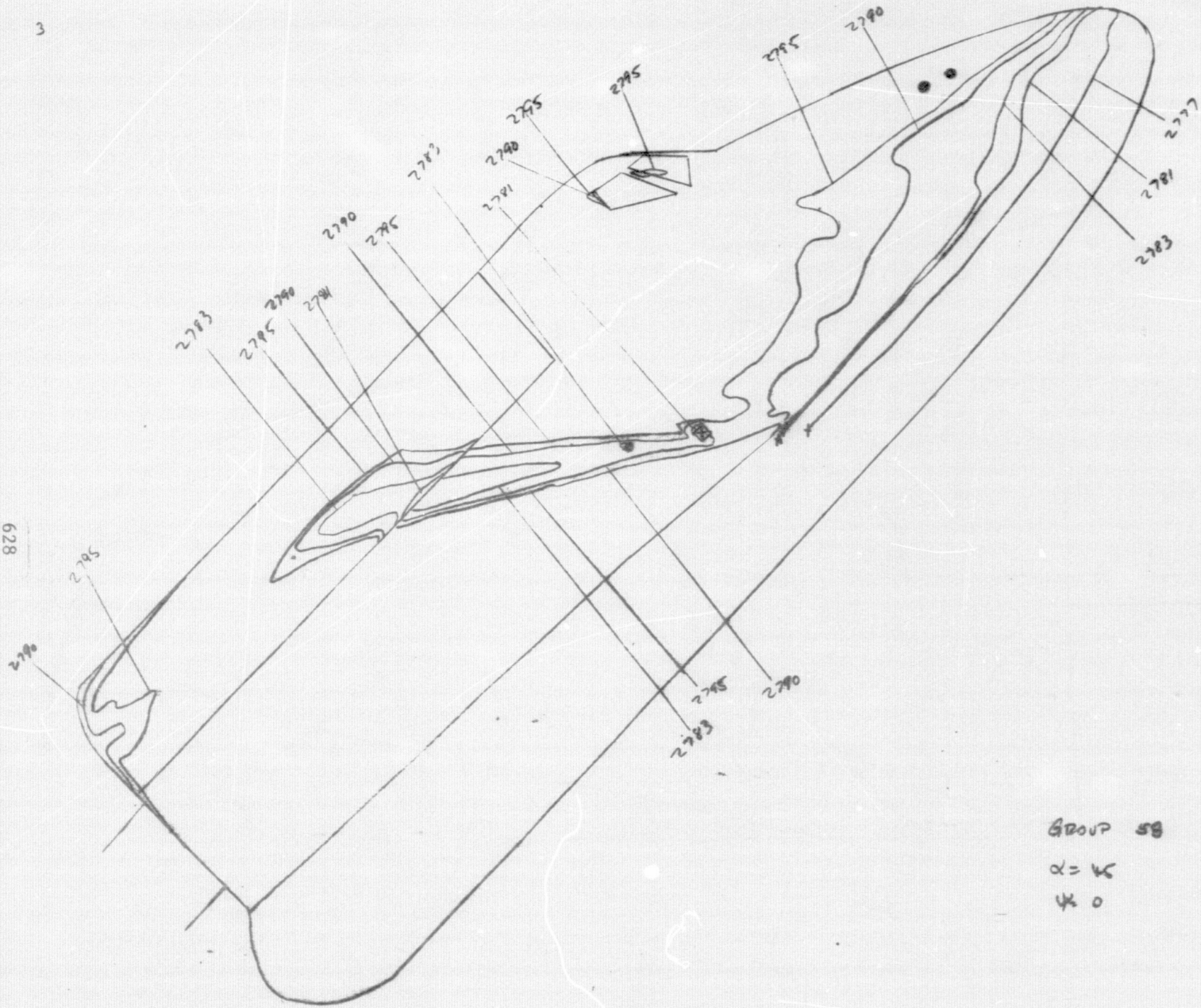
PIC NO	TIME RELATIVE		H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.934TO)	H(.934TO)/HREF	SI(TO)
TOP 7771(350)	29.46	28.45	4.955E-03	.2195	6.470E-03	.2832	7.779E-03	.3405	3.984E-03
US 7771(131)	29.46	28.45	5.669E-04	.0244	6.806E-04	.0298	7.659E-04	.0335	4.625E-04
BOT 8851(131)	29.46	28.45	5.669E-04	.0244	6.806E-04	.0298	7.659E-04	.0335	4.625E-04
NOS 9351(131)	29.46	28.45	5.669E-04	.0244	6.806E-04	.0298	7.659E-04	.0335	4.625E-04
TOP 7772(350)	30.56	29.55	4.769E-03	.2085	6.349E-03	.2779	7.632E-03	.3341	3.910E-03
US 7772(131)	30.56	29.55	5.464E-04	.0239	6.678E-04	.0292	7.515E-04	.0329	4.539E-04
BOT 8852(131)	30.56	29.55	5.464E-04	.0239	6.678E-04	.0292	7.515E-04	.0329	4.539E-04
NOS 9352(131)	30.56	29.55	5.464E-04	.0239	6.678E-04	.0292	7.515E-04	.0329	4.539E-04
BOT 8853(131)	41.77	40.76	4.853E-04	.0204	5.686E-04	.0249	6.399E-04	.0280	3.861E-04
NOS 9353(131)	41.77	40.76	4.853E-04	.0204	5.686E-04	.0249	6.399E-04	.0280	3.861E-04

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GROUP 58
$\alpha = 45$
$\psi = 0$

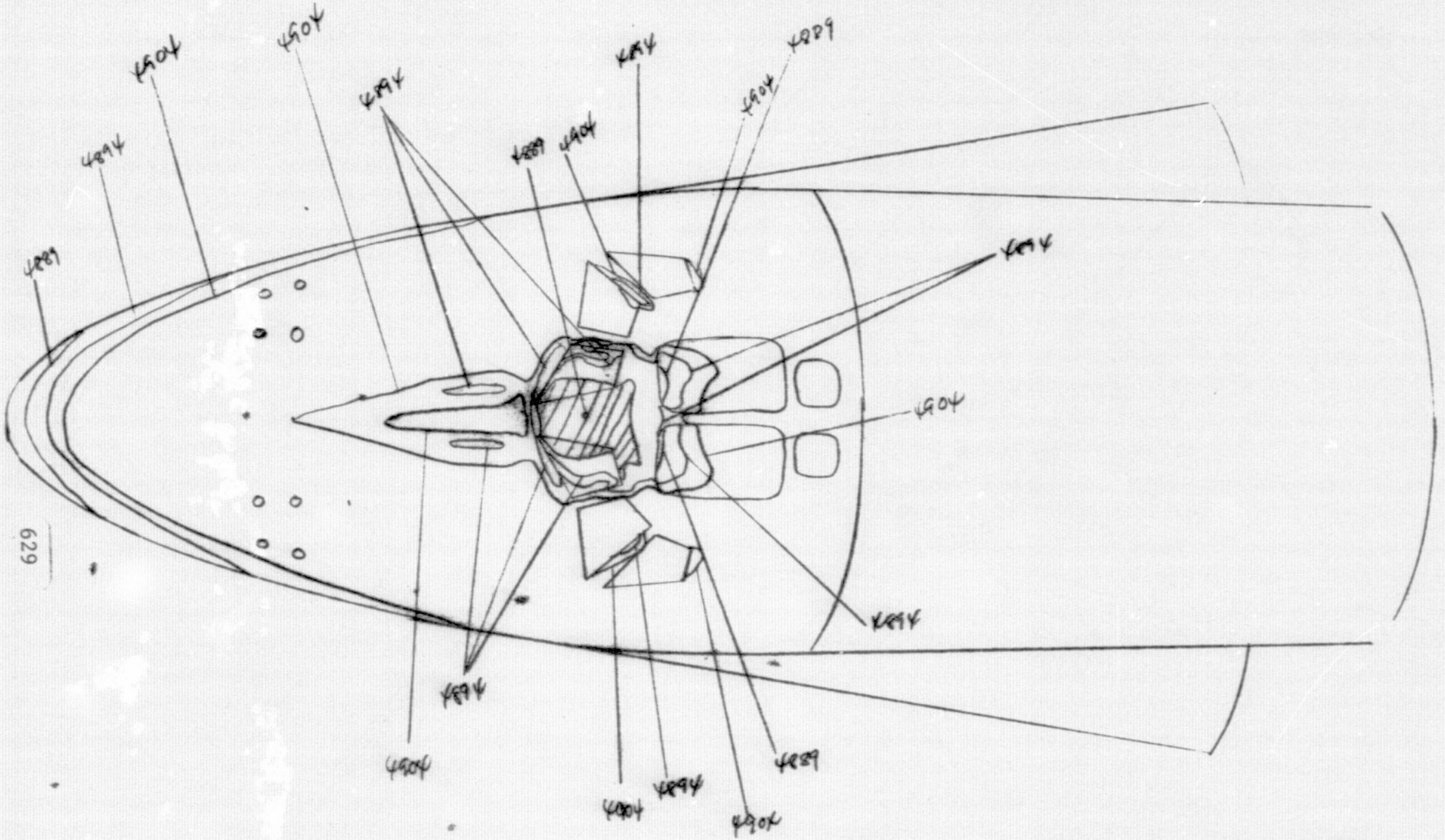


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GROUP 58

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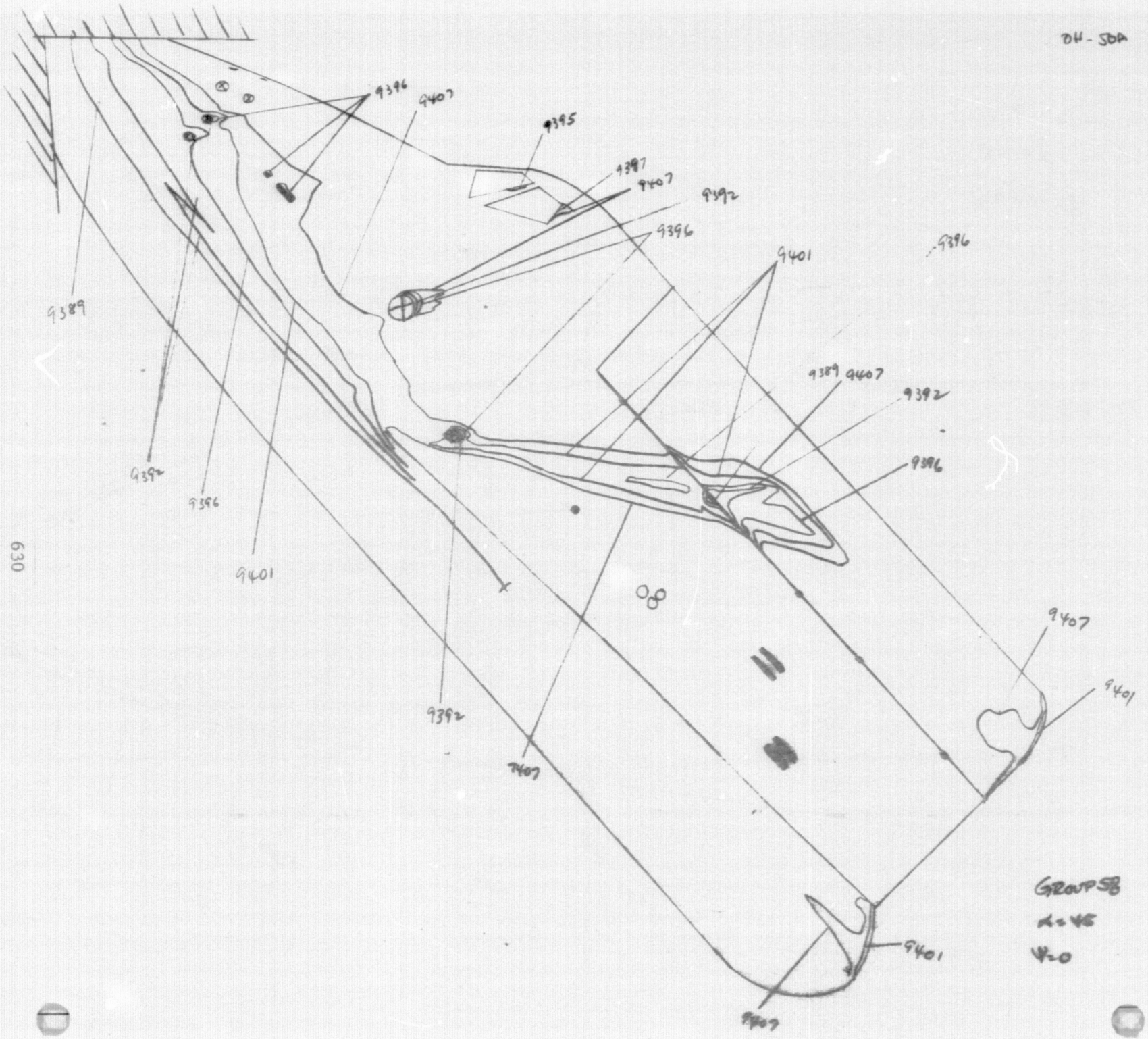
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Grow 58

$\alpha = 45$

$\psi = 0$

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REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

4/10/74

NASA-RT OHRD — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
NASA — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTON	ALPHA-PREBEND	ROLL-MODEL	YAW
SP	0	7.98	425.2	1294	45.00	8.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.5	.044	1.973	3801	3.931E-05	7.606E-08	1.964E 06	2.281E-02	1.923E-02

CAPERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAK)	TRAR(TO)	BETA(TO)
NOP SIDE(NOS)	8284	131	83	.0497	0	0
OP SIDE(OS)	7506	131	83	.0497	0	0
BOTTOM(BOT)	7608	131	83	.0497	0	0
TOP(TOP)	7529	400	83	.0585	0	0

PIC NO	TIME DELTIME		H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7776(400)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 7774(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
BOT 8286(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
NOS 9386(131)	.03		MODEL HAS NOT REACHED CENTERLINE						
TOP 7775(400)	1.08		MODEL HAS NOT REACHED CENTERLINE						
OS 7775(131)	1.08		MODEL HAS NOT REACHED CENTERLINE						
BOT 8287(131)	1.08		MODEL HAS NOT REACHED CENTERLINE						
NOS 9387(131)	1.08		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =		1.80							
TOP 7776(400)	2.15	1.14	3.139E-02	1.375	4.323E-02	1.8942	5.348E-02	2.3436	2.583E-02
OS 7776(131)	2.15	1.14	2.762E-03	.1210	3.372E-03	.1478	3.793E-03	.1662	2.306E-03
BOT 8288(131)	2.15	1.14	2.762E-03	.1210	3.372E-03	.1478	3.793E-03	.1662	2.306E-03
NOS 9388(131)	2.15	1.14	2.762E-03	.1210	3.372E-03	.1478	3.793E-03	.1662	2.306E-03
TOP 7777(400)	3.23	2.22	2.252E-02	.3865	3.101E-02	1.3586	3.837E-02	1.6809	1.852E-02
OS 7777(131)	3.23	2.22	1.943E-03	.0868	2.419E-03	.1060	2.721E-03	.1192	1.654E-03
BOT 8289(131)	3.23	2.22	1.943E-03	.0868	2.419E-03	.1060	2.721E-03	.1192	1.654E-03
NOS 9389(131)	3.23	2.22	1.943E-03	.0868	2.419E-03	.1060	2.721E-03	.1192	1.654E-03
TOP 7778(400)	4.30	3.29	1.647E-02	.8096	2.544E-02	1.1150	3.148E-02	1.3795	1.520E-02
OS 7778(131)	4.30	3.29	1.626E-03	.0712	1.985E-03	.0870	2.232E-03	.0978	1.358E-03
BOT 8290(131)	4.30	3.29	1.626E-03	.0712	1.985E-03	.0870	2.232E-03	.0978	1.358E-03
NOS 9390(131)	4.30	3.29	1.626E-03	.0712	1.985E-03	.0870	2.232E-03	.0978	1.358E-03
BOT 8291(131)	5.38	4.37	1.011E-03	.0618	1.723E-03	.0755	1.933E-03	.0849	1.178E-03
TOP 7779(400)	5.41	4.39	1.599E-02	.7008	2.203E-02	.9651	2.725E-02	1.1940	1.316E-02
OS 7779(131)	5.41	4.39	1.407E-03	.0617	1.718E-03	.0753	1.932E-03	.0847	1.175E-03
NOS 9391(131)	5.41	4.39	1.407E-03	.0617	1.718E-03	.0753	1.932E-03	.0847	1.175E-03
TOP 7780(400)	6.48	5.47	1.433E-02	.6280	1.974E-02	.8649	2.442E-02	1.0700	1.179E-02
OS 7780(131)	6.48	5.47	1.211E-03	.0553	1.540E-03	.0675	1.732E-03	.0759	1.053E-03
BOT 8292(131)	6.48	5.47	1.261E-03	.0553	1.540E-03	.0675	1.732E-03	.0759	1.053E-03
NOS 9392(131)	6.48	5.47	1.261E-03	.0553	1.540E-03	.0675	1.732E-03	.0759	1.053E-03

NASA-RI OH50 — AEDC(ARO•INC.) ARNOLD AFS• TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL R

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTION	ALPHA-FOREBND	ROLL-MODEL	YAW
58	0	7.98	425.7	1294	45.00	8.00	55.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SIREF (R= .04 FT)
94.5	.044	1.975	3891	3.935E-05	7.608E-08	1.966E 06	2.282E-02	1.922E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACAK)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	8284	131	83	.0497	6.359E-02	5.9366E-02
OP SIDE(OS)	7906	131	83	.0497	6.359E-02	5.9366E-02
BOTTOM(BOT)	7800	131	83	.0497	6.359E-02	5.9366E-02
TOP(TOP)	7929	40n	83	.0585	4.200E-01	5.7309E-01

PTC NO	TIME DELTIME		H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 77R1(480)	7.56	6.55	1.210E-02	.5743	1.805E-02	.7909	2.233E-02	.9785	1.079E-02
OS 27R1(131)	7.56	6.55	1.153E-03	.0505	1.408E-03	.0617	1.583E-03	.0694	9.631E-04
HOT 4853(131)	7.56	6.55	1.153E-03	.0505	1.408E-03	.0617	1.583E-03	.0694	9.631E-04
NOS 5393(131)	7.56	6.55	1.153E-03	.0505	1.408E-03	.0617	1.583E-03	.0694	9.631E-04
OS 27R2(131)	8.63	7.62	1.069E-03	.0468	1.304E-03	.0572	1.467E-03	.0643	8.923E-04
HOT 4894(131)	8.63	7.62	1.069E-03	.0468	1.304E-03	.0572	1.467E-03	.0643	8.923E-04
NOS 5394(131)	8.63	7.62	1.069E-03	.0468	1.304E-03	.0572	1.467E-03	.0643	8.923E-04
TOP 77R2(480)	8.66	7.65	1.212E-02	.5313	1.670E-02	.7317	2.056E-02	.9053	9.979E-03
TOP 77R3(480)	9.74	8.72	1.135E-02	.4973	1.563E-02	.6849	1.934E-02	.8473	9.337E-03
OS 27R3(131)	9.74	8.72	9.998E-04	.0438	1.219E-03	.0534	1.372E-03	.0601	8.337E-04
HOT 4895(131)	9.74	8.72	9.998E-04	.0438	1.219E-03	.0534	1.372E-03	.0601	8.337E-04
NOS 5395(131)	9.74	8.72	9.998E-04	.0438	1.219E-03	.0534	1.372E-03	.0601	8.337E-04
TOP 77R4(480)	10.81	9.80	1.071E-02	.4692	1.475E-02	.6462	1.825E-02	.7994	8.810E-03
OS 27R4(131)	10.81	9.80	9.525E-04	.0417	1.350E-03	.0504	1.294E-03	.0567	7.866E-04
HOT 4896(131)	10.81	9.80	9.425E-04	.0413	1.150E-03	.0504	1.294E-03	.0567	7.866E-04
NOS 5396(131)	10.81	9.80	9.425E-04	.0413	1.150E-03	.0504	1.294E-03	.0567	7.866E-04
TOP 77R5(480)	11.89	10.88	1.017E-02	.4455	1.400E-02	.6135	1.732E-02	.7590	8.367E-03
OS 27R5(131)	11.89	10.88	8.946E-04	.0392	1.092E-03	.0479	1.228E-03	.0538	7.471E-04
HOT 4897(131)	11.89	10.88	8.946E-04	.0392	1.092E-03	.0479	1.228E-03	.0538	7.471E-04
NOS 5397(131)	11.89	10.88	8.946E-04	.0392	1.092E-03	.0479	1.228E-03	.0538	7.471E-04
HOT 4898(131)	12.96	11.95	8.534E-04	.0374	1.042E-03	.0456	1.172E-03	.0513	7.121E-04
TOP 77R6(480)	12.99	11.98	9.287E-03	.4243	1.334E-02	.5844	1.651E-02	.7230	7.967E-03
OS 27R6(131)	12.99	11.98	8.525E-04	.0373	1.041E-03	.0456	1.171E-03	.0513	7.114E-04
NOS 5398(131)	12.99	11.98	8.525E-04	.0373	1.041E-03	.0456	1.171E-03	.0513	7.114E-04
TOP 77R7(480)	14.07	13.05	9.279E-03	.4065	1.276E-02	.5598	1.581E-02	.6924	7.632E-03
OS 27R7(131)	14.07	13.05	8.166E-04	.0358	9.969E-04	.0437	1.121E-03	.0491	6.814E-04
HOT 4899(131)	14.07	13.05	8.166E-04	.0358	9.969E-04	.0437	1.121E-03	.0491	6.814E-04
NOS 5399(131)	14.07	13.05	8.166E-04	.0358	9.969E-04	.0437	1.121E-03	.0491	6.814E-04

4/10/74

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL A

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREREND	ROLL-MODEL	YAW
58	0	7.98	425.8	1298	45.00	8.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	RREF (R= .04 FT)	STREF (R= .04 FT)
94.5	.044	1.976	3961	3.435E-05	7.60HE-0H	1.966E 06	2.203E-02	1.922E-02

CAMERA	ROLL NO	POINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACR)	TRAR(TO)	BETA(TO)
NOR SIDE(NOS)	8284	131	83	.0497	6.359E-02	5.9366E-02
UP SIDE(US)	7906	131	83	.0497	6.359E-02	5.9366E-02
HOTTOM(BOT)	7600	131	83	.0497	6.359E-02	5.9366E-02
TOP(TOP)	7529	400	83	.0585	4.200E-01	5.7309E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7748(400)	15.14	14.13	8.919E-03	.3997	1.228E-02	.5481	1.520E-02	.6658	7.337E-03
US 2748(131)	15.14	14.13	7.649E-04	.0344	9.581E-04	.0420	1.078E-03	.0472	6.551E-04
HOT 4900(131)	15.14	14.13	7.649E-04	.0344	9.581E-04	.0420	1.078E-03	.0479	6.551E-04
NOS 8400(131)	15.14	14.13	7.649E-04	.0344	9.581E-04	.0420	1.078E-03	.0472	6.551E-04
HOT 4901(131)	16.22	15.21	7.556E-04	.0331	9.236E-04	.0405	1.039E-03	.0455	6.312E-04
TOP 7749(400)	16.24	15.23	8.590E-03	.3763	1.183E-02	.5183	1.464E-02	.6412	7.065E-03
US 2749(131)	16.24	15.23	7.560E-04	.0331	9.229E-04	.0404	1.038E-03	.0455	6.309E-04
NOS 8401(131)	16.24	15.23	7.560E-04	.0331	9.229E-04	.0404	1.038E-03	.0455	6.309E-04
TOP 7790(400)	17.32	16.31	8.302E-03	.3636	1.143E-02	.5007	1.415E-02	.6195	6.825E-03
US 2790(131)	17.32	16.31	7.406E-04	.0320	8.919E-04	.0391	1.003E-03	.0439	6.094E-04
HOT 4902(131)	17.32	16.31	7.306E-04	.0320	8.919E-04	.0391	1.003E-03	.0439	6.094E-04
NOS 8402(131)	17.32	16.31	7.306E-04	.0320	8.919E-04	.0391	1.003E-03	.0439	6.094E-04
TOP 7791(400)	18.40	17.38	8.041E-03	.3522	1.107E-02	.4851	1.370E-02	.6001	6.612E-03
US 2791(131)	18.40	17.38	7.176E-04	.0310	8.638E-04	.0378	9.716E-04	.0426	5.904E-04
HOT 4903(131)	18.40	17.38	7.076E-04	.0310	8.638E-04	.0378	9.716E-04	.0424	5.904E-04
NOS 8403(131)	18.40	17.38	7.076E-04	.0310	8.638E-04	.0378	9.716E-04	.0426	5.904E-04
TOP 7792(400)	19.47	18.46	7.702E-03	.3417	1.075E-02	.4706	1.330E-02	.5823	6.415E-03
OS 2792(131)	19.47	18.46	6.867E-04	.0301	8.383E-04	.0367	9.429E-04	.0413	5.728E-04
HOT 4904(131)	19.47	18.46	6.867E-04	.0301	8.383E-04	.0367	9.429E-04	.0413	5.728E-04
NOS 8404(131)	19.47	18.46	6.867E-04	.0301	8.383E-04	.0367	9.429E-04	.0413	5.728E-04
TOP 7793(400)	20.57	19.56	7.590E-03	.3320	1.044E-02	.4572	1.292E-02	.5657	6.232E-03
OS 2793(131)	20.57	19.56	6.671E-04	.0292	8.143E-04	.0357	9.159E-04	.0401	5.564E-04
HOT 4905(131)	20.57	19.56	6.671E-04	.0292	8.143E-04	.0357	9.159E-04	.0401	5.564E-04
NOS 8405(131)	20.57	19.56	6.671E-04	.0292	8.143E-04	.0357	9.159E-04	.0401	5.564E-04
TOP 7794(400)	21.65	20.64	7.380E-03	.3233	1.016E-02	.4453	1.257E-02	.5509	6.071E-03
US 2794(131)	21.65	20.64	6.495E-04	.0285	7.928E-04	.0347	8.917E-04	.0391	5.421E-04
HOT 4906(131)	21.65	20.64	6.495E-04	.0285	7.928E-04	.0347	8.917E-04	.0391	5.421E-04
NOS 8406(131)	21.65	20.64	6.495E-04	.0285	7.928E-04	.0347	8.917E-04	.0391	5.421E-04

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NASA-RT OH5G

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL A

VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREHEND	ROLL-MODEL	YAW
58	0	7.98	425.7	1258	-5.00	8.00	53.00	0	0

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.5	.044	1.975	3801	3.934E-05	7.609E-08	1.585E 06	2.283E-02	1.922E-02

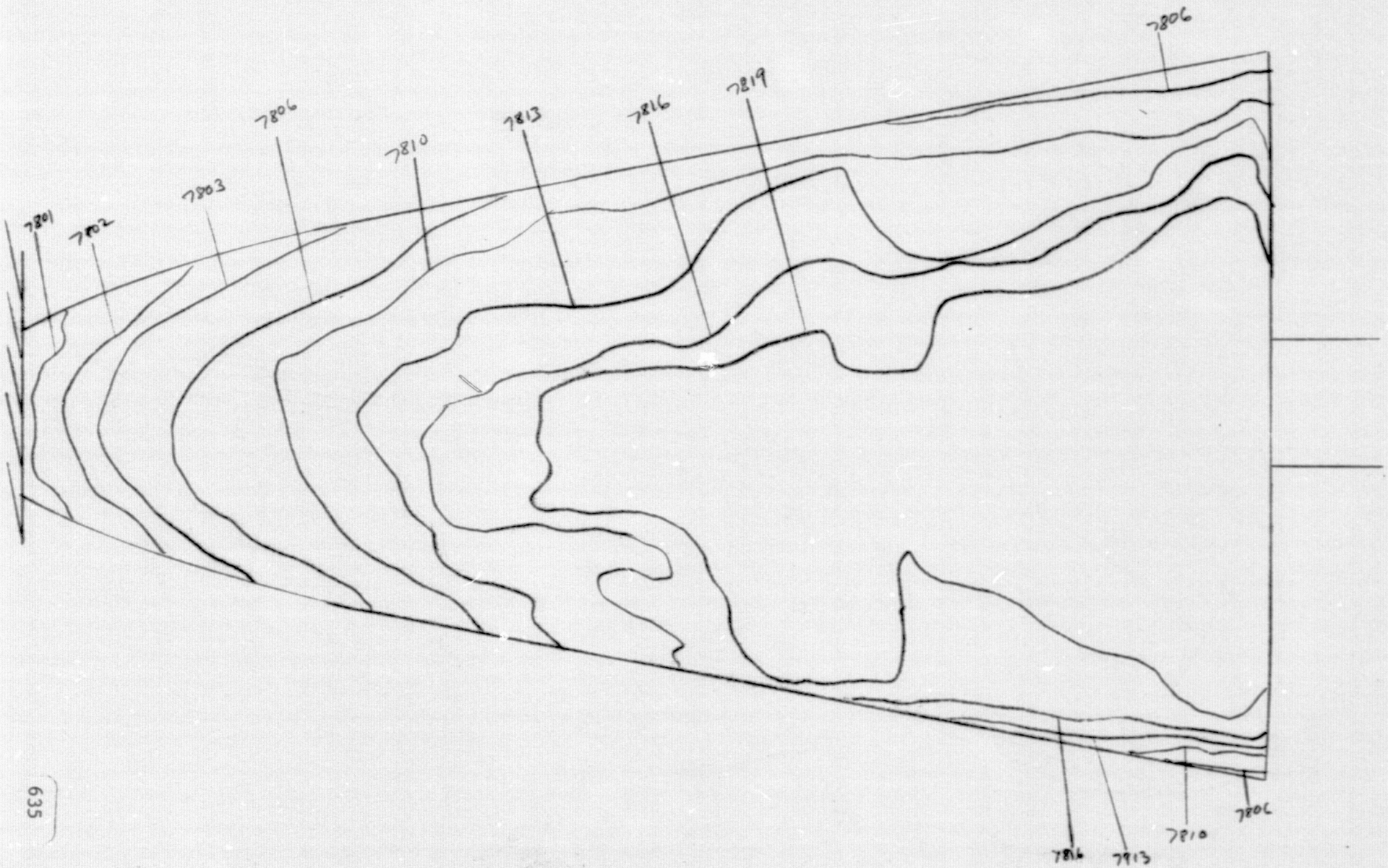
CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAN)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	8284	131	83	.0497	6.359E-02	5.9366E-02
UP SIDE(US)	7906	131	83	.0497	6.359E-02	5.9366E-02
BOTTOM(BOT)	7600	131	83	.0497	6.359E-02	5.9366E-02
TOP(TOP)	7929	400	83	.0585	4.200E-01	5.7309E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.945TO)	H(.945TO)/HREF	ST(TO)
TOP 7795(400)	22.73	21.71	7.195E-03	.3152	9.908E-03	.4341	1.226E-02	.5370	5.917E-03
US 7795(131)	22.73	21.71	6.332E-04	.0277	7.729E-04	.0339	8.694E-04	.0381	5.284E-04
NOT 4917(131)	22.73	21.71	6.332E-04	.0277	7.729E-04	.0339	8.694E-04	.0381	5.284E-04
NOS 8417(131)	22.73	21.71	6.332E-04	.0277	7.729E-04	.0339	8.694E-04	.0381	5.284E-04
NOT 4908(131)	23.80	22.79	6.176E-04	.0271	7.545E-04	.0330	8.466E-04	.0372	5.154E-04
TOP 7796(400)	23.82	22.82	7.019E-03	.3074	9.666E-03	.4233	1.196E-02	.5238	5.770E-03
US 7796(131)	23.83	22.82	6.177E-04	.0271	7.540E-04	.0330	8.481E-04	.0371	5.152E-04
NOS 8408(131)	23.83	22.82	6.177E-04	.0271	7.540E-04	.0330	8.481E-04	.0371	5.152E-04
	24.00		MODEL HAS LEFT CENTERLINE						
TOP 7797(400)	24.90	23.89	6.559E-03	.3003	9.446E-03	.4136	1.169E-02	.5118	5.638E-03
US 7797(131)	24.90	23.89	6.036E-04	.0264	7.369E-04	.0323	8.288E-04	.0363	5.034E-04
NOT 4909(131)	24.90	23.89	6.036E-04	.0264	7.369E-04	.0323	8.288E-04	.0363	5.034E-04
NOS 8409(131)	24.90	23.89	6.036E-04	.0264	7.369E-04	.0323	8.288E-04	.0363	5.034E-04

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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OH 50A



GROUP 59
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GROUP 59

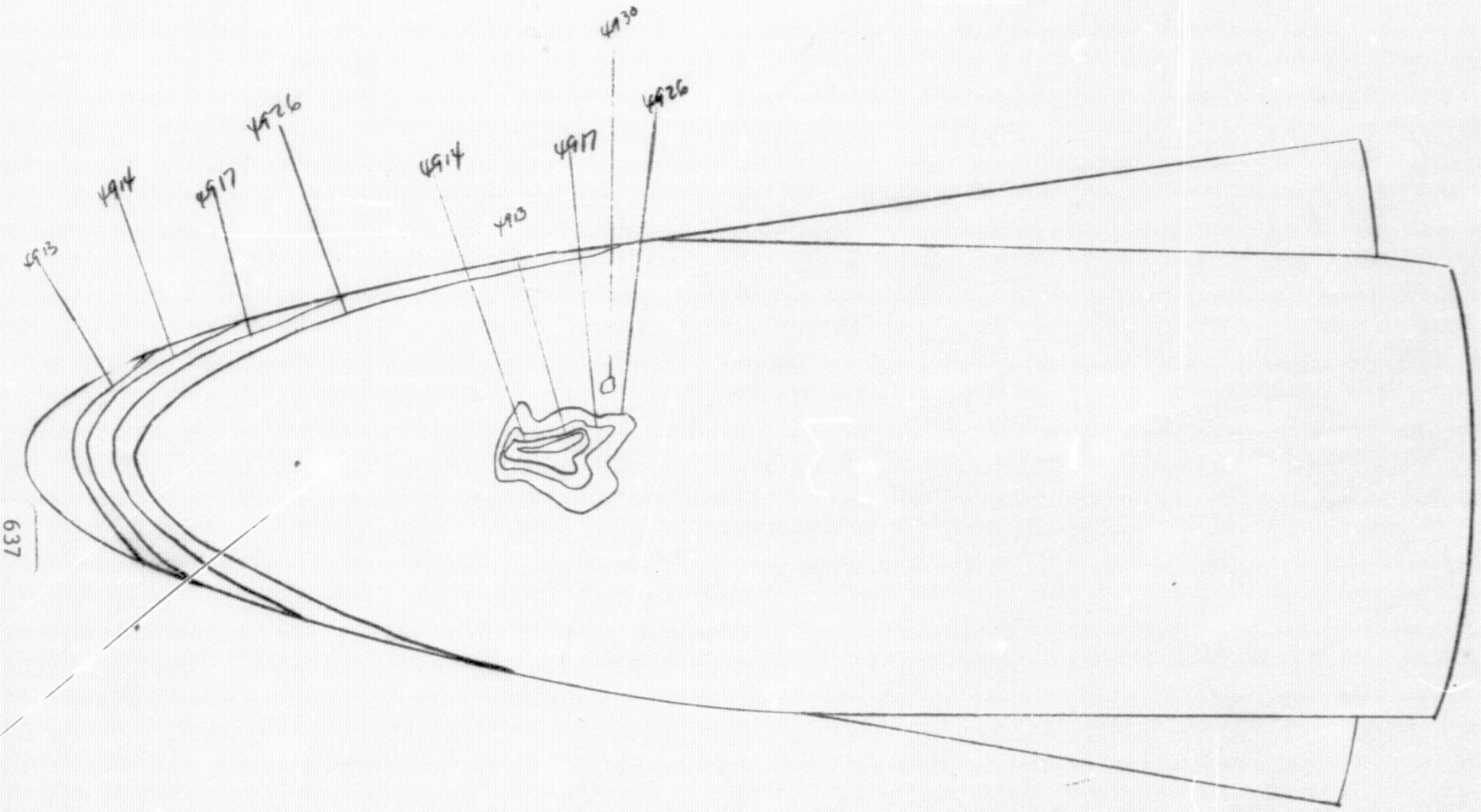
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REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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GROUP 59
α = 30
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REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

NASA-RI OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
59	0	7.94	213.0	1286	53.05	-.12	53.00	-4.00	3.28

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.5	.023	1.011	3783	2.034E-05	7.610E-08	1.011E 06	1.630E-02	2.671E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	8284	113	84	.0486	0	0
OP SIDE(OS)	7906	113	84	.0486	0	0
BOTTOM(BOT)	7800	113	84	.0486	0	0
TOP(TOP)	7929	175	84	.0518	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.96TO)	H(.96TO)/HREF	ST(TO)
OS 2798(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
BO 4910(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 7798(175)	.05		MODEL HAS NOT REACHED CENTERLINE						
NO 9410(113)	.05		MODEL HAS NOT REACHED CENTERLINE						
TO 7799(175)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 2799(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
BO 4911(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 9411(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.78								
TOP 7800(175)	2.18	1.18	5.743E-03	.3525	7.110E-03	.4364	8.073E-03	.4955	9.315E-03
OS 2800(113)	2.18	1.18	1.599E-03	.0981	1.947E-03	.1195	2.185E-03	.1341	2.602E-03
BOT 4912(113)	2.18	1.18	1.599E-03	.0981	1.947E-03	.1195	2.185E-03	.1341	2.602E-03
NOS 9412(113)	2.18	1.18	1.599E-03	.0981	1.947E-03	.1195	2.185E-03	.1341	2.602E-03
TOP 7801(175)	3.25	2.26	4.153E-03	.2551	5.142E-03	.3159	5.838E-03	.3587	6.749E-03
OS 2801(113)	3.25	2.26	1.156E-03	.0710	1.408E-03	.0865	1.580E-03	.0971	1.885E-03
BOT 4913(113)	3.25	2.26	1.156E-03	.0710	1.408E-03	.0865	1.580E-03	.0971	1.885E-03
NOS 9413(113)	3.25	2.26	1.156E-03	.0710	1.408E-03	.0865	1.580E-03	.0971	1.885E-03
TOP 7802(175)	4.33	3.33	3.417E-03	.2098	4.231E-03	.2598	4.804E-03	.2950	5.548E-03
OS 2802(113)	4.33	3.33	9.514E-04	.0584	1.159E-03	.0711	1.300E-03	.0798	1.550E-03
BOT 4914(113)	4.33	3.33	9.514E-04	.0584	1.159E-03	.0711	1.300E-03	.0798	1.550E-03
NOS 9414(113)	4.33	3.33	9.514E-04	.0584	1.159E-03	.0711	1.300E-03	.0798	1.550E-03
TOP 7803(175)	5.41	4.41	2.971E-03	.1824	3.678E-03	.2258	4.176E-03	.2564	4.824E-03
OS 2803(113)	5.41	4.41	8.271E-04	.0508	1.007E-03	.0618	1.130E-03	.0694	1.347E-03
BOT 4915(113)	5.41	4.41	8.271E-04	.0508	1.007E-03	.0618	1.130E-03	.0694	1.347E-03
NOS 9415(113)	5.41	4.41	8.271E-04	.0508	1.007E-03	.0618	1.130E-03	.0694	1.347E-03
BOT 4916(113)	6.48	5.48	7.415E-04	.0455	9.030E-04	.0554	1.013E-03	.0622	1.208E-03

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4/10/74

NASA-RI OHS0 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
VA526 — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
59	0	7.94	212.5	1286	53.05	-.12	53.00	-4.00	3.28

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.5	.023	1.009	3783	2.029E-05	7.611E-08	1.008E 06	1.629E-02	2.674E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	8284	113	84	.0486	3.906E-02	3.5734E-02
OP SIDE(OS)	7906	113	84	.0486	3.906E-02	3.5734E-02
BOTTOM(BOT)	7808	113	84	.0486	3.906E-02	3.5734E-02
TOP(TOP)	7929	175	84	.0518	1.226E-01	1.2042E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.961TO)	H(.961TO)/HREF	ST(TO)
TOP 7804(175)	6.51	5.51	2.657E-03	.1632	3.290E-03	.2021	3.736E-03	.2294	4.317E-03
OS 2804(113)	6.51	5.51	7.399E-04	.0454	9.010E-04	.0553	1.011E-03	.0621	1.206E-03
NOS 9416(113)	6.51	5.51	7.399E-04	.0454	9.010E-04	.0553	1.011E-03	.0621	1.206E-03
TOP 7805(175)	7.58	6.59	2.431E-03	.1492	3.009E-03	.1847	3.417E-03	.2097	3.943E-03
OS 2805(113)	7.58	6.59	6.767E-04	.0415	8.241E-04	.0506	9.249E-04	.0568	1.101E-03
BOT 4917(113)	7.58	6.59	6.767E-04	.0415	8.241E-04	.0506	9.249E-04	.0568	1.101E-03
NOS 9417(113)	7.58	6.59	6.767E-04	.0415	8.241E-04	.0506	9.249E-04	.0568	1.101E-03
TOP 7806(175)	8.66	7.66	2.253E-03	.1383	2.790E-03	.1712	3.168E-03	.1944	3.656E-03
OS 2806(113)	8.66	7.66	6.274E-04	.0385	7.640E-04	.0469	8.575E-04	.0526	1.021E-03
BOT 4918(113)	8.66	7.66	6.274E-04	.0385	7.640E-04	.0469	8.575E-04	.0526	1.021E-03
NOS 9418(113)	8.66	7.66	6.274E-04	.0385	7.640E-04	.0469	8.575E-04	.0526	1.021E-03
TOP 7807(175)	9.74	8.74	2.110E-03	.1295	2.612E-03	.1603	2.966E-03	.1820	3.421E-03
OS 2807(113)	9.74	8.74	5.875E-04	.0360	7.154E-04	.0439	8.029E-04	.0493	9.558E-04
BOT 4919(113)	9.74	8.74	5.875E-04	.0360	7.154E-04	.0439	8.029E-04	.0493	9.558E-04
NOS 9419(113)	9.74	8.74	5.875E-04	.0360	7.154E-04	.0439	8.029E-04	.0493	9.558E-04
BOT 4920(113)	10.81	9.81	5.543E-04	.0340	6.751E-04	.0414	7.576E-04	.0465	9.019E-04
TOP 7808(175)	10.84	9.84	1.989E-03	.1220	2.462E-03	.1511	2.795E-03	.1715	3.224E-03
OS 2809(113)	10.84	9.84	5.536E-04	.0340	6.742E-04	.0414	7.567E-04	.0464	9.007E-04
NOS 9420(113)	10.84	9.84	5.536E-04	.0340	6.742E-04	.0414	7.567E-04	.0464	9.007E-04
TOP 7809(175)	11.91	10.92	1.888E-03	.1158	2.337E-03	.1434	2.654E-03	.1629	3.061E-03
OS 2809(113)	11.91	10.92	5.256E-04	.0323	6.401E-04	.0393	7.184E-04	.0441	8.552E-04
BOT 4921(113)	11.91	10.92	5.256E-04	.0323	6.401E-04	.0393	7.184E-04	.0441	8.552E-04
NOS 9421(113)	11.91	10.92	5.256E-04	.0323	6.401E-04	.0393	7.184E-04	.0441	8.552E-04
TOP 7810(175)	12.99	11.99	1.801E-03	.1105	2.230E-03	.1368	2.532E-03	.1553	2.919E-03
OS 2810(113)	12.99	11.99	5.015E-04	.0308	6.107E-04	.0375	6.854E-04	.0420	8.155E-04
BOT 4922(113)	12.99	11.99	5.015E-04	.0308	6.107E-04	.0375	6.854E-04	.0420	8.155E-04
NOS 9422(113)	12.99	11.99	5.015E-04	.0308	6.107E-04	.0375	6.854E-04	.0420	8.155E-04

NASA-RI OH50
VA526

AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
59	0	7.94	212.9	1287	53.03	-.12	53.00	-4.00	3.20

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STREF (R= .04 FT)
94.6	.023	1.011	3783	2.032E-05	7.612E-08	1.010E 06	1.630E-02	2.672E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	8284	113	84	.0486	3.906E-02	3.5734E-02
OP SIDE(OS)	7906	113	84	.0486	3.906E-02	3.5734E-02
BOTTOM(BOT)	7800	113	84	.0486	3.906E-02	3.5734E-02
TOP(TOP)	7929	175	84	.0518	1.226E-01	1.2042E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.961TO)	H(.961TO)/HREF	ST(TO)
BOT 4923(113)	14.07	13.07	4.804E-04	.0295	5.850E-04	.0359	6.566E-04	.0403	7.813E-04
TOP 7811(175)	14.09	13.09	1.724E-03	.1057	2.134E-03	.1309	2.423E-03	.1487	2.794E-03
OS 2811(113)	14.09	13.09	4.799E-04	.0294	5.845E-04	.0359	6.559E-04	.0402	7.805E-04
NOS 9423(113)	14.09	13.09	4.799E-04	.0294	5.845E-04	.0359	6.559E-04	.0402	7.805E-04
TOP 7812(175)	15.17	14.17	1.657E-03	.1016	2.052E-03	.1258	2.330E-03	.1429	2.685E-03
OS 2812(113)	15.17	14.17	4.614E-04	.0283	5.618E-04	.0345	6.305E-04	.0387	7.500E-04
BOT 4924(113)	15.17	14.17	4.614E-04	.0283	5.618E-04	.0345	6.305E-04	.0387	7.500E-04
NOS 9424(113)	15.17	14.17	4.614E-04	.0283	5.618E-04	.0345	6.305E-04	.0387	7.500E-04
TOP 7813(175)	16.24	15.25	1.598E-03	.0980	1.978E-03	.1213	2.246E-03	.1378	2.589E-03
OS 2813(113)	16.24	15.25	4.448E-04	.0273	5.416E-04	.0332	6.079E-04	.0373	7.233E-04
BOT 4925(113)	16.24	15.25	4.448E-04	.0273	5.416E-04	.0332	6.079E-04	.0373	7.233E-04
NOS 9425(113)	16.24	15.25	4.448E-04	.0273	5.416E-04	.0332	6.079E-04	.0373	7.233E-04
TOP 7814(175)	17.32	16.32	1.544E-03	.0947	1.912E-03	.1172	2.171E-03	.1331	2.501E-03
OS 2814(113)	17.32	16.32	4.299E-04	.0264	5.235E-04	.0321	5.875E-04	.0360	6.988E-04
BOT 4926(113)	17.32	16.32	4.299E-04	.0264	5.235E-04	.0321	5.875E-04	.0360	6.988E-04
NOS 9426(113)	17.32	16.32	4.299E-04	.0264	5.235E-04	.0321	5.875E-04	.0360	6.988E-04
BOT 4927(113)	18.40	17.40	4.164E-04	.0255	5.070E-04	.0311	5.690E-04	.0349	6.771E-04
TOP 7815(175)	18.42	17.42	1.494E-03	.0916	1.850E-03	.1135	2.101E-03	.1288	2.421E-03
OS 2815(113)	18.42	17.42	4.161E-04	.0255	5.067E-04	.0311	5.686E-04	.0349	6.763E-04
NOS 9427(113)	18.42	17.42	4.161E-04	.0255	5.067E-04	.0311	5.686E-04	.0349	6.763E-04
TOP 7816(175)	19.50	18.50	1.450E-03	.0890	1.796E-03	.1101	2.039E-03	.1251	2.351E-03
OS 2816(113)	19.50	18.50	4.038E-04	.0248	4.917E-04	.0302	5.518E-04	.0339	6.567E-04
BOT 4928(113)	19.50	18.50	4.038E-04	.0248	4.917E-04	.0302	5.518E-04	.0339	6.567E-04
NOS 9428(113)	19.50	18.50	4.038E-04	.0248	4.917E-04	.0302	5.518E-04	.0339	6.567E-04
TOP 7817(175)	20.57	19.58	1.410E-03	.0865	1.745E-03	.1071	1.982E-03	.1216	2.285E-03
OS 2817(113)	20.57	19.58	3.925E-04	.0241	4.780E-04	.0293	5.364E-04	.0329	6.384E-04
BOT 4929(113)	20.57	19.58	3.925E-04	.0241	4.780E-04	.0293	5.364E-04	.0329	6.384E-04
NOS 9429(113)	20.57	19.58	3.925E-04	.0241	4.780E-04	.0293	5.364E-04	.0329	6.384E-04

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4/10/74

NASA-RI OH58 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VA526 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
59	0	7.94	212.9	1287	53.05	-.12	53.00	-4.00	3.20

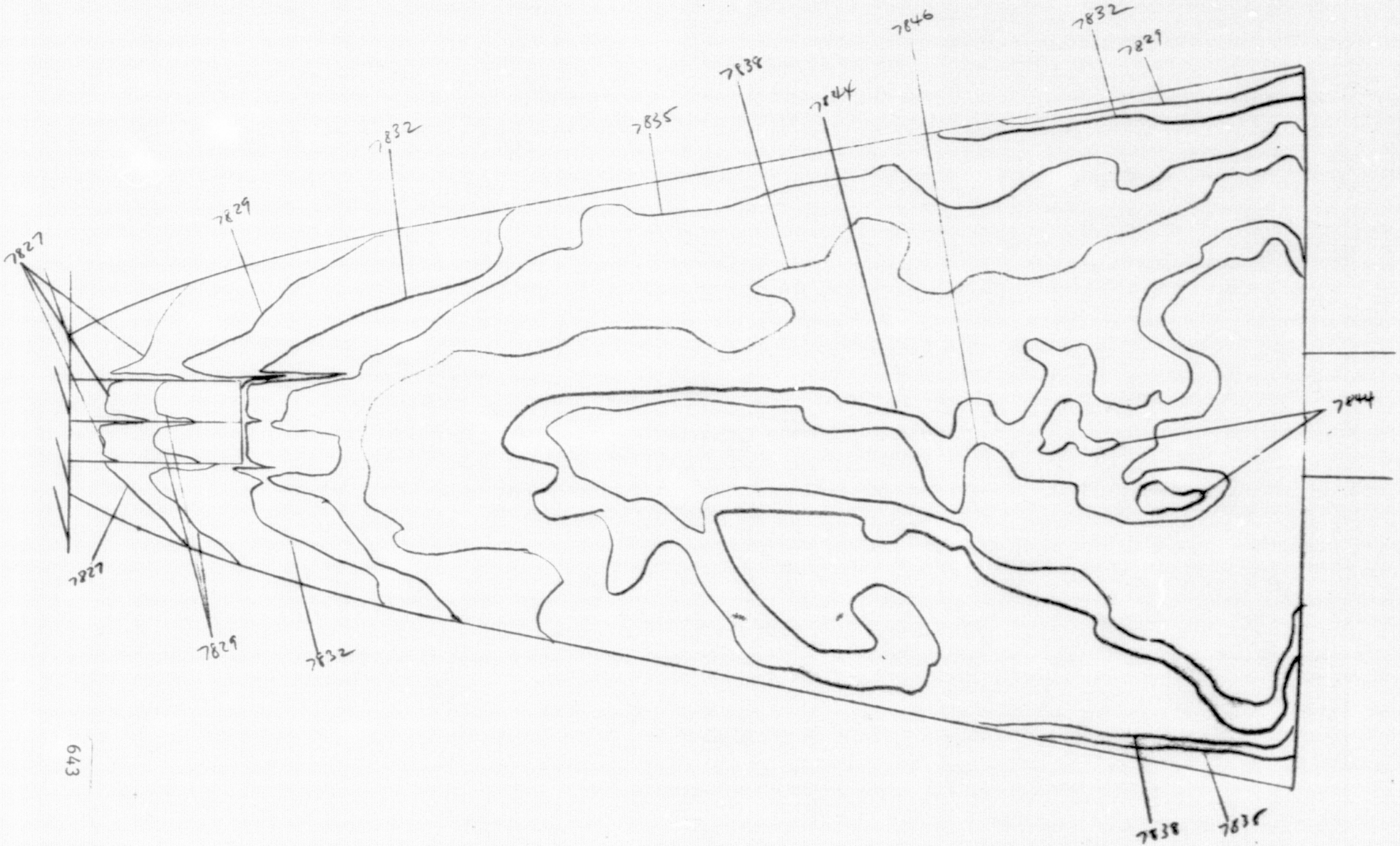
T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SREF (R= .04 FT)
94.6	.023	1.011	3784	2.032E-05	7.614E-08	1.010E 06	1.630E-02	2.672E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCXK)	TBAR(TO)	BETA(TO)
NOP SIDE(NOS)	8284	113	84	.0486	3.906E-02	3.5734E-02
OP SIDE(OS)	7906	113	84	.0486	3.906E-02	3.5734E-02
BOTTOM(BOT)	7800	113	84	.0486	3.906E-02	3.5734E-02
TOP(TOP)	7929	175	84	.0518	1.226E-01	1.2042E-01

PIC NO	TIME	DELTIME	M(TO)	M(TO)/HREF	M(.9TO)	M(.9TO)/HREF	M(.961TO)	M(.961TO)/HREF	ST(TO)
BOT 4930(113)	21.65	20.65	3.822E-04	.0234	4.654E-04	.0285	5.223E-04	.0320	6.212E-04
TOP 7818(175)	21.67	20.68	1.372E-03	.0841	1.698E-03	.1042	1.928E-03	.1183	2.224E-03
OS 2818(113)	21.67	20.68	3.819E-04	.0234	4.651E-04	.0285	5.220E-04	.0320	6.212E-04
NOS 9430(113)	21.67	20.68	3.819E-04	.0234	4.651E-04	.0285	5.220E-04	.0320	6.212E-04
TOP 7819(175)	22.75	21.75	1.337E-03	.0820	1.656E-03	.1015	1.880E-03	.1153	2.167E-03
OS 2819(113)	22.75	21.75	3.724E-04	.0228	4.534E-04	.0278	5.089E-04	.0312	6.053E-04
BOT 4931(113)	22.75	21.75	3.724E-04	.0228	4.534E-04	.0278	5.089E-04	.0312	6.053E-04
NOS 9431(113)	22.75	21.75	3.724E-04	.0228	4.534E-04	.0278	5.089E-04	.0312	6.053E-04
TOP 7820(175)	23.83	22.83	1.306E-03	.0801	1.616E-03	.0991	1.835E-03	.1126	2.116E-03
OS 2820(113)	23.83	22.83	3.635E-04	.0223	4.426E-04	.0272	4.968E-04	.0305	5.912E-04
BOT 4932(113)	23.83	22.83	3.635E-04	.0223	4.426E-04	.0272	4.968E-04	.0305	5.912E-04
NOS 9432(113)	23.83	22.83	3.635E-04	.0223	4.426E-04	.0272	4.968E-04	.0305	5.912E-04
	24.75		MODEL HAS LEFT CENTERLINE						
BOT 4933(113)	24.90	23.91	3.552E-04	.0218	4.325E-04	.0265	4.854E-04	.0298	5.774E-04
TOP 7821(175)	24.93	23.93	1.275E-03	.0782	1.579E-03	.0968	1.793E-03	.1100	2.067E-03
OS 2821(113)	24.93	23.93	3.550E-04	.0218	4.323E-04	.0265	4.852E-04	.0298	5.774E-04
NOS 9433(113)	24.93	23.93	3.550E-04	.0218	4.323E-04	.0265	4.852E-04	.0298	5.774E-04
TOP 7822(175)	26.00	25.01	1.247E-03	.0765	1.544E-03	.0948	1.754E-03	.1076	2.023E-03
OS 2822(113)	26.00	25.01	3.473E-04	.0213	4.229E-04	.0259	4.746E-04	.0291	5.651E-04
BOT 4934(113)	26.00	25.01	3.473E-04	.0213	4.229E-04	.0259	4.746E-04	.0291	5.651E-04
NOS 9434(113)	26.00	25.01	3.473E-04	.0213	4.229E-04	.0259	4.746E-04	.0291	5.651E-04

3

OH - 504



643

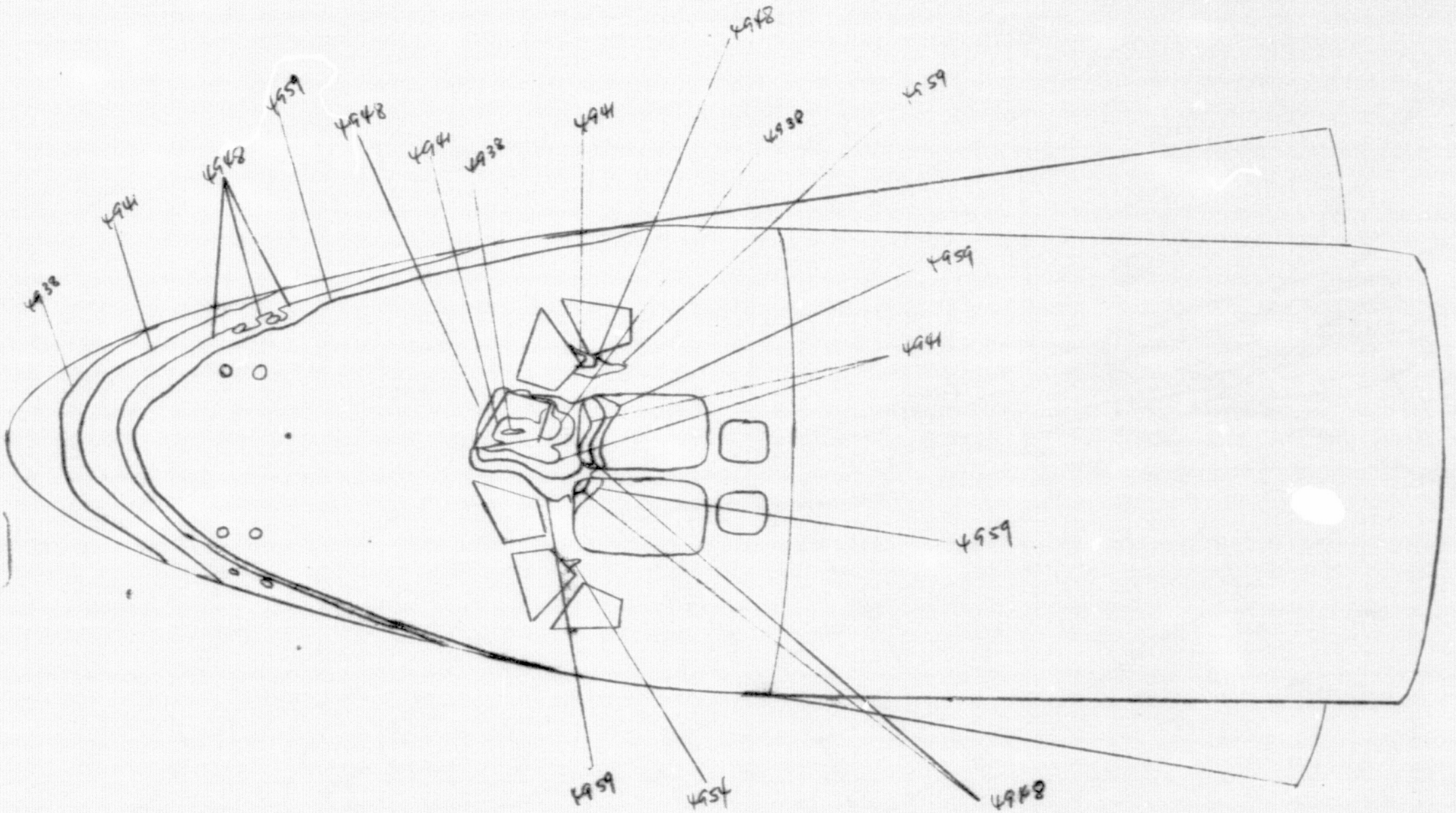
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REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

GROUP 60

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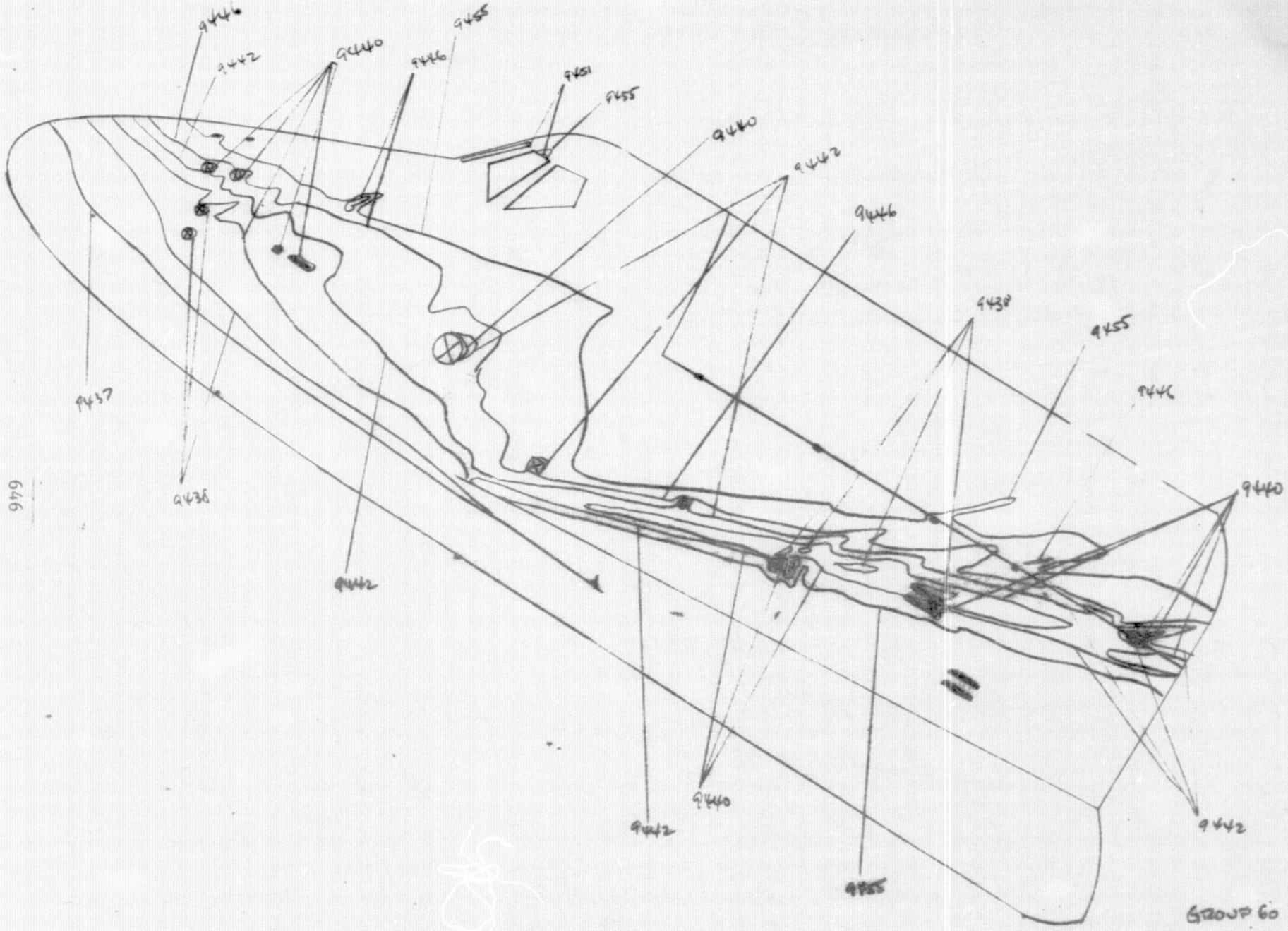
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GROUP 60

$\alpha = 30$

$\psi = +2$


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9455
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9437
9436
9442
9440
9442
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GROUP 60
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4/10/74

NASA-AI OHSO — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE

VA526 — VON KARMAN GAS DYNAMICS FACILITY

50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
60	0	7.94	211.2	1297	30.06	-.12	30.00	-4.00	2.01

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SIREF (R= .04 FT)
95.3	.023	1.003	3790	2.001E-05	7.671E-08	9.904E 05	1.626E-02	2.695E-02

CAMERA	HULL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOXCAN)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	8284	113	84	.0480	0	0
UP SIDE(OS)	7906	113	84	.0486	0	0
NOTCM(BOT)	7c00	113	84	.0486	0	0
TOF(TOP)	7929	175	84	.0518	0	0

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.913TO)	H(.913TO)/HREF	ST(TO)
TO 7823(175)	.03		MODEL HAS NOT REACHED CENTERLINE						
OS 2823(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 4935(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
NO 9435(113)	.03		MODEL HAS NOT REACHED CENTERLINE						
TO 7824(175)	1.10		MODEL HAS NOT REACHED CENTERLINE						
OS 2824(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 4936(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
NO 9436(113)	1.10		MODEL HAS NOT REACHED CENTERLINE						
INJECT TIME =	1.83								
TOF 7825(175)	2.15	1.13	5.787E-03	.3560	7.154E-03	.4399	8.110E-03	.4986	9.486E-03
OS 2825(113)	2.15	1.13	1.613E-03	.0992	1.961E-03	.1206	2.199E-03	.1353	2.652E-03
NOT 4937(113)	2.15	1.15	1.595E-03	.0981	1.940E-03	.1193	2.175E-03	.1338	2.623E-03
NOS 9437(113)	2.14	1.15	1.595E-03	.0981	1.940E-03	.1193	2.175E-03	.1338	2.623E-03
TOF 7826(175)	3.25	2.23	4.115E-03	.2531	5.080E-03	.3124	5.708E-03	.3547	6.743E-03
OS 2826(113)	3.25	2.23	1.147E-03	.0705	1.395E-03	.0858	1.564E-03	.0962	1.885E-03
NOT 4938(113)	3.25	2.23	1.147E-03	.0705	1.395E-03	.0858	1.564E-03	.0962	1.885E-03
NOS 9438(113)	3.25	2.23	1.147E-03	.0705	1.395E-03	.0858	1.564E-03	.0962	1.885E-03
TOF 7827(175)	4.33	3.30	3.379E-03	.2079	4.177E-03	.2569	4.730E-03	.2913	5.539E-03
OS 2827(113)	4.33	3.30	9.416E-04	.0579	1.145E-03	.0704	1.284E-03	.0790	1.549E-03
NOT 4939(113)	4.33	3.30	9.416E-04	.0579	1.145E-03	.0704	1.284E-03	.0790	1.549E-03
NOS 9439(113)	4.33	3.30	9.416E-04	.0579	1.145E-03	.0704	1.284E-03	.0790	1.549E-03
TOF 7828(175)	5.41	4.38	2.935E-03	.1805	3.628E-03	.2231	4.113E-03	.2530	4.811E-03
OS 2828(113)	5.41	4.38	8.178E-04	.0503	9.945E-04	.0612	1.115E-03	.0686	1.345E-03
NOT 4940(113)	5.41	4.38	8.178E-04	.0503	9.945E-04	.0612	1.115E-03	.0686	1.345E-03
NOS 9440(113)	5.41	4.38	8.178E-04	.0503	9.945E-04	.0612	1.115E-03	.0686	1.345E-03
TOF 7829(175)	6.51	5.48	2.624E-03	.1614	3.243E-03	.1995	3.677E-03	.2262	4.301E-03
OS 2829(113)	6.51	5.48	7.311E-04	.0450	8.890E-04	.0547	9.971E-04	.0613	1.202E-03
NOT 4941(113)	6.51	5.48	7.311E-04	.0450	8.890E-04	.0547	9.971E-04	.0613	1.202E-03
NOS 9441(113)	6.51	5.48	7.311E-04	.0450	8.890E-04	.0547	9.971E-04	.0613	1.202E-03

NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VAS26 — VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREREND	ROLL-MODEL	YAW
60	0	7.94	211.2	1297	30.06	-.12	30.00	-4.00	2.01

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	PE/FT (FT-1)	RREF (RE= .04 FT)	SIREF (RE= .04 FT)
95.3	.023	1.003	3798	2.001E-05	7.671E-08	5.904E 05	1.626E-02	2.695E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOACAK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	8289	113	84	.0486	3.853E-02	3.5219E-02
UP SIDE(OS)	7506	113	84	.0486	3.853E-02	3.5219E-02
BOTTOM(BOT)	7600	113	84	.0486	3.853E-02	3.5219E-02
TOP(TOP)	7529	175	84	.0518	1.209E-01	1.1859E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.913TO)	H(.913TO)/HREF	ST(TO)
TOP 7830(175)	7.54	6.56	2.399E-03	.1474	2.965E-03	.1822	3.362E-03	.2066	3.926E-03
OS 2830(113)	7.54	6.56	6.884E-04	.0411	8.120E-04	.0500	9.110E-04	.0560	1.098E-03
BOT 4942(113)	7.54	6.56	6.884E-04	.0411	8.120E-04	.0500	9.110E-04	.0560	1.098E-03
NOS 9442(113)	7.54	6.56	6.884E-04	.0411	8.120E-04	.0500	9.110E-04	.0560	1.098E-03
BOT 4943(113)	8.66	7.63	6.195E-04	.0381	7.534E-04	.0463	8.449E-04	.0520	1.019E-03
TOP 7831(175)	8.68	7.66	2.229E-03	.1365	2.743E-03	.1687	3.111E-03	.1913	3.637E-03
OS 2831(113)	8.68	7.66	6.185E-04	.0380	7.521E-04	.0462	8.436E-04	.0519	1.017E-03
NOS 9443(113)	8.68	7.66	6.185E-04	.0380	7.521E-04	.0462	8.436E-04	.0519	1.017E-03
TOP 7832(175)	9.76	8.74	2.087E-03	.1278	2.569E-03	.1580	2.913E-03	.1791	3.405E-03
OS 2832(113)	9.76	8.74	5.791E-04	.0356	7.043E-04	.0433	7.899E-04	.0486	9.520E-04
BOT 4944(113)	9.76	8.74	5.791E-04	.0356	7.043E-04	.0433	7.899E-04	.0486	9.520E-04
NOS 9444(113)	9.76	8.74	5.791E-04	.0356	7.043E-04	.0433	7.899E-04	.0486	9.520E-04
TOP 7833(175)	10.84	9.81	1.961E-03	.1206	2.424E-03	.1490	2.748E-03	.1690	3.212E-03
OS 2833(113)	10.84	9.81	5.464E-04	.0336	6.645E-04	.0409	7.453E-04	.0458	8.979E-04
BOT 4945(113)	10.84	9.81	5.464E-04	.0336	6.645E-04	.0409	7.453E-04	.0458	8.979E-04
NOS 9445(113)	10.84	9.81	5.464E-04	.0336	6.645E-04	.0409	7.453E-04	.0458	8.979E-04
TOP 7834(175)	11.94	10.91	1.869E-03	.1143	2.298E-03	.1413	2.606E-03	.1602	3.047E-03
OS 2834(113)	11.94	10.91	5.181E-04	.0319	6.301E-04	.0387	7.067E-04	.0435	8.518E-04
BOT 4946(113)	11.94	10.91	5.181E-04	.0319	6.301E-04	.0387	7.067E-04	.0435	8.518E-04
NOS 9446(113)	11.94	10.91	5.181E-04	.0319	6.301E-04	.0387	7.067E-04	.0435	8.518E-04
TOP 7835(175)	13.01	11.99	1.774E-03	.1091	2.193E-03	.1348	2.486E-03	.1529	2.907E-03
OS 2835(113)	13.01	11.99	4.993E-04	.0304	6.012E-04	.0370	6.742E-04	.0415	8.127E-04
BOT 4947(113)	13.01	11.99	4.993E-04	.0304	6.012E-04	.0370	6.742E-04	.0415	8.127E-04
NOS 9447(113)	13.01	11.99	4.993E-04	.0304	6.012E-04	.0370	6.742E-04	.0415	8.127E-04
TOP 7836(175)	14.12	13.09	1.699E-03	.1044	2.096E-03	.1290	2.379E-03	.1463	2.782E-03
OS 2836(113)	14.12	13.09	4.731E-04	.0291	5.753E-04	.0354	6.453E-04	.0397	7.778E-04
BOT 4948(113)	14.12	13.09	4.731E-04	.0291	5.753E-04	.0354	6.453E-04	.0397	7.778E-04
NOS 9448(113)	14.12	13.09	4.731E-04	.0291	5.753E-04	.0354	6.453E-04	.0397	7.778E-04

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NASA-RI OH50 — AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE

VON KARMAN GAS DYNAMICS FACILITY

VA52E — 50 INCH HYPERSONIC TUNNEL B

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
60	0	7.94	211.3	1297	30.06	-.12	30.00	-4.00	2.01

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	STHEF (R= .04 FT)
95.3	.023	1.093	3796	2.001E-05	7.673E-08	9.906E 05	1.626E-02	2.695E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOAOAR)	TBAR(TO)	BETA(TO)
NOR SIDE(NOS)	8284	113	84	.0486	3.853E-02	3.5219E-02
OP SIDE(OS)	7906	113	84	.0486	3.853E-02	3.5219E-02
BOTTOM(BOT)	7e00	113	84	.0486	3.853E-02	3.5219E-02
TOP(TOP)	7929	175	84	.0518	1.209E-01	1.1859E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.913TO)	H(.913TO)/HREF	ST(TO)
TOP 7837(175)	15.19	14.17	1.632E-03	.1004	2.017E-03	.1240	2.287E-03	.1406	2.674E-03
OS 2837(113)	15.19	14.17	4.598E-04	.0280	5.530E-04	.0340	6.203E-04	.0381	7.476E-04
BOT 4949(113)	15.19	14.17	4.548E-04	.0280	5.530E-04	.0340	6.203E-04	.0381	7.476E-04
NOS 5449(113)	15.19	14.17	4.548E-04	.0280	5.530E-04	.0340	6.203E-04	.0381	7.476E-04
BOT 4950(113)	16.27	15.24	4.384E-04	.0269	5.331E-04	.0328	5.980E-04	.0368	7.200E-04
TOP 7838(175)	16.29	15.27	1.572E-03	.0967	1.943E-03	.1195	2.203E-03	.1355	2.576E-03
OS 2838(113)	16.29	15.27	4.381E-04	.0269	5.327E-04	.0328	5.975E-04	.0367	7.201E-04
NOS 5450(113)	16.29	15.27	4.381E-04	.0269	5.327E-04	.0328	5.975E-04	.0367	7.201E-04
TOP 7839(175)	17.37	16.34	1.519E-03	.0934	1.870E-03	.1155	2.129E-03	.1309	2.488E-03
OS 2839(113)	17.37	16.34	4.234E-04	.0260	5.149E-04	.0317	5.775E-04	.0355	6.957E-04
BOT 4951(113)	17.37	16.34	4.234E-04	.0260	5.149E-04	.0317	5.775E-04	.0355	6.957E-04
NOS 5451(113)	17.37	16.34	4.234E-04	.0260	5.149E-04	.0317	5.775E-04	.0355	6.957E-04
TOP 7840(175)	18.45	17.42	1.472E-03	.0905	1.819E-03	.1119	2.063E-03	.1268	2.411E-03
OS 2840(113)	18.45	17.42	4.101E-04	.0252	4.987E-04	.0307	5.593E-04	.0344	6.742E-04
BOT 4952(113)	18.45	17.42	4.101E-04	.0252	4.987E-04	.0307	5.593E-04	.0344	6.742E-04
TOP 7841(175)	19.52	18.50	1.428E-03	.0878	1.765E-03	.1086	2.002E-03	.1231	2.340E-03
OS 2841(113)	19.52	18.50	3.980E-04	.0245	4.840E-04	.0298	5.428E-04	.0334	6.543E-04
BOT 4953(113)	19.52	18.50	3.980E-04	.0245	4.840E-04	.0298	5.428E-04	.0334	6.543E-04
TOP 7842(175)	20.60	19.57	1.389E-03	.0854	1.716E-03	.1055	1.946E-03	.1197	2.275E-03
OS 2842(113)	20.60	19.57	3.869E-04	.0238	4.705E-04	.0289	5.277E-04	.0324	6.360E-04
BOT 4954(113)	20.60	19.57	3.869E-04	.0238	4.705E-04	.0289	5.277E-04	.0324	6.360E-04
TOP 7843(175)	21.67	20.65	1.352E-03	.0831	1.671E-03	.1027	1.895E-03	.1165	2.215E-03
OS 2843(113)	21.67	20.65	3.767E-04	.0232	4.581E-04	.0282	5.138E-04	.0316	6.193E-04
BOT 4955(113)	21.67	20.65	3.767E-04	.0232	4.581E-04	.0282	5.138E-04	.0316	6.193E-04
NOS 5452(113)	21.67	20.65	3.767E-04	.0232	4.581E-04	.0282	5.138E-04	.0316	6.193E-04

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NASA-RI OH50 AEDC(ARO,INC.) ARNOLD AFS, TENNESSEE
VON KARMAN GAS DYNAMICS FACILITY
50 INCH HYPERSONIC TUNNEL B
VA526

GROUP	CONFIG	MACH NO	PO(PSIA)	TO(DEG R)	ALPHA-MODEL	ALPHA-SECTOR	ALPHA-PREBEND	ROLL-MODEL	YAW
60	9	7.94	211.3	1297	30.06	-.12	30.00	-4.00	2.01

T-INF (DEG R)	P-INF (PSIA)	Q-INF (PSIA)	V-INF (FT/SEC)	RHO-INF (SLUGS/FT3)	MU-INF (LB-SEC/FT2)	RE/FT (FT-1)	HREF (R= .04 FT)	SIREF (R= .04 FT)
95.3	.023	1.003	3798	2.001E-05	7.673E-08	6.506E 05	1.626E-02	2.695E-02

CAMERA	ROLL NO	PAINT TEMP (DEG F)	INITIAL TEMP (DEG F)	SQUARE ROOT (RHOCACAK)	TBAR(TO)	BETA(TO)
NOF SIDE(NOS)	8284	113	84	.0486	3.853E-02	3.5219E-02
OP SIDE(OS)	7506	113	84	.0486	3.853E-02	3.5219E-02
BOTTOM(BOT)	7600	113	84	.0486	3.853E-02	3.5219E-02
TOP(TOP)	7529	175	84	.0518	1.209E-01	1.1859E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF	H(.913TO)	H(.913TO)/HREF	ST(TO)
NOT 4956(113)	22.75	21.73	3.672E-04	.0226	4.466E-04	.0275	5.009E-04	.0308	6.040E-04
TOP 7844(175)	22.78	21.75	1.817E-03	.0810	1.628E-03	.1002	1.848E-03	.1136	2.160E-03
OS 2844(113)	22.78	21.75	3.670E-04	.0226	4.463E-04	.0275	5.006E-04	.0308	6.039E-04
NOS 9453(113)	22.78	21.75	3.670E-04	.0226	4.463E-04	.0275	5.006E-04	.0308	6.039E-04
TOP 7845(175)	23.85	22.83	1.284E-03	.0791	1.589E-03	.0977	1.802E-03	.1108	2.107E-03
OS 2845(113)	23.85	22.83	3.583E-04	.0220	4.357E-04	.0268	4.886E-04	.0300	5.890E-04
NOT 4957(113)	23.85	22.83	3.583E-04	.0220	4.357E-04	.0268	4.886E-04	.0300	5.890E-04
NOS 9454(113)	23.85	22.83	3.583E-04	.0220	4.357E-04	.0268	4.886E-04	.0300	5.890E-04
OS 2846(113)	24.93	23.90	3.501E-04	.0215	4.257E-04	.0262	4.775E-04	.0294	5.755E-04
NOT 4958(113)	24.93	23.90	3.501E-04	.0215	4.257E-04	.0262	4.775E-04	.0294	5.755E-04
NOS 9455(113)	24.93	23.90	3.501E-04	.0215	4.257E-04	.0262	4.775E-04	.0294	5.755E-04
TOP 7846(175)	24.95	23.93	1.256E-03	.0772	1.552E-03	.0954	1.760E-03	.1082	2.057E-03
TOP 7847(175)	26.03	25.00	1.228E-03	.0755	1.516E-03	.0934	1.722E-03	.1059	2.013E-03
OS 2847(113)	26.03	25.00	3.423E-04	.0210	4.163E-04	.0256	4.669E-04	.0287	5.627E-04
NOT 4959(113)	26.03	25.00	3.423E-04	.0210	4.163E-04	.0256	4.669E-04	.0287	5.627E-04
NOS 9456(113)	26.03	25.00	3.423E-04	.0210	4.163E-04	.0256	4.669E-04	.0287	5.627E-04
		26.76	MODEL WAS LEFT CENTERLINE						
TOP 7848(175)	27.11	26.08	1.203E-03	.0740	1.487E-03	.0914	1.686E-03	.1037	1.971E-03
OS 2848(113)	27.11	26.08	3.352E-04	.0206	4.076E-04	.0251	4.571E-04	.0281	5.510E-04
NOT 4960(113)	27.11	26.08	3.352E-04	.0206	4.076E-04	.0251	4.571E-04	.0281	5.510E-04
NOS 9457(113)	27.11	26.08	3.352E-04	.0206	4.076E-04	.0251	4.571E-04	.0281	5.510E-04
OS 2849(113)	28.18	27.16	3.285E-04	.0202	3.994E-04	.0246	4.480E-04	.0275	5.400E-04
NOT 4961(113)	28.18	27.16	3.285E-04	.0202	3.994E-04	.0246	4.480E-04	.0275	5.400E-04
NOS 9458(113)	28.18	27.16	3.285E-04	.0202	3.994E-04	.0246	4.480E-04	.0275	5.400E-04
TOP 7849(175)	28.21	27.18	1.178E-03	.0725	1.456E-03	.0895	1.651E-03	.1015	1.931E-03